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The aim of the Society being to arrive at true conclusions through free discussion, it is distinctly to be understood that the Editor is not held responsible for statements made in the Journal.

Contributions and correspondence should be addressed to G. R. G. WORCESTER, Esq., Penny Cottage, Pound Lane, Windlesham, Surrey. All articles, notes, queries, answers and reviews of books should be typed, on one side of the paper, preferably quarto, with double-spacing and with a wide margin. The name and address of the author must be given on the last page. As a general rule, the length of an article should not exceed 10,000 words and, owing to the high costs of production, photographs and line drawings to illustrate contributions must be restricted to a minimum. The lettering should be clear of the illustration and indicate by blue pencilled lines the desired position.

Names of ships should be underlined to denote italics, and not written within inverted commas.

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Vol. 47. No. 3

1961

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EDITORIAL

The November issue will be the last number of the *Mariner's Mirror* to be ssued under my editorship. In the past it has been customary for retiring editors to emulate the 'Old Soldiers who...simply fade away', but it is because I have received so much kindness from so many people during my term of office that I feel I must record my indebtedness to some of them.

In the first place, of course, I thank the two Presidents under whom have served, Dr R. C. Anderson, F.S.A., and Professor Michael Lewis, C.B.E., for their aid and guidance; then the Hon. Secretary, Lieutenant-Commander G. Naish, F.S.A., R.N.R., for his help, and the Treasurer, Mr R. Lowen, M.B.E., for turning a blind eye when the *Journal* was expensive, but giving me credit when it was not. To Lieutenant-Colonel I. Hughes I owe a great debt for having prepared the index of seven volumes and thereby relieved me of a great burden.

On and after 1 November 1961 all contributions and correspondence

hould be addressed to the new editor:

CAPTAIN T. DAVYS MANNING, C.B.E., V.R.D., R.N.V.R., Newlands, Seaford, Sussex.

Captain Manning has been a member of the Society for many years, and in 1956 he delivered the Annual Lecture on 'Warship names'. Three

MM

years later he and Commander C. F. Walker published their book British Warship Names. This year, Captain Manning's book The British Destroyer

has been published.

Of my predecessors all but two (Carr Laughton and Perrin) have been in office for 7 years or more, and I trust that my successor will enjoy the same length of service or more, and be as happy in it as I have been.

G. R. G. WORCESTER

THE SOCIETY'S ANNUAL LECTURE

HE Society's annual lecture for 1960 was given on 5 September 1960 by Baron Rubin de Cervin Albrizzi in the lecture hall of the National Maritime Museum, Greenwich. The Chairman, Professor Michael Lewis, C.B.E., in introducing the speaker said:

'We meet this afternoon for our annual lecture and I would take this early opportunity of thanking the Trustees and the Director of the National

Maritime Museum for allowing us to assemble in such comfort.

This year we are particularly fortunate in securing the services of the distinguished Italian naval archaeologist, Baron Rubin de Cervin Albrizzi, a Director of the Maritime Museum of Venice, and owner of the Palazzo Albrizzi, one of the world-famous Venetian palaces. He is, as you know, an artist of great distinction and is interested in ship-modelling. He is to talk to us on the subject of "The Shipping of Venice"; and members of the Society will hardly need reminding of his complete competence to do so, for they will readily recall his recent series of articles in the *Mariner's Mirror*.

The following paper was then read:

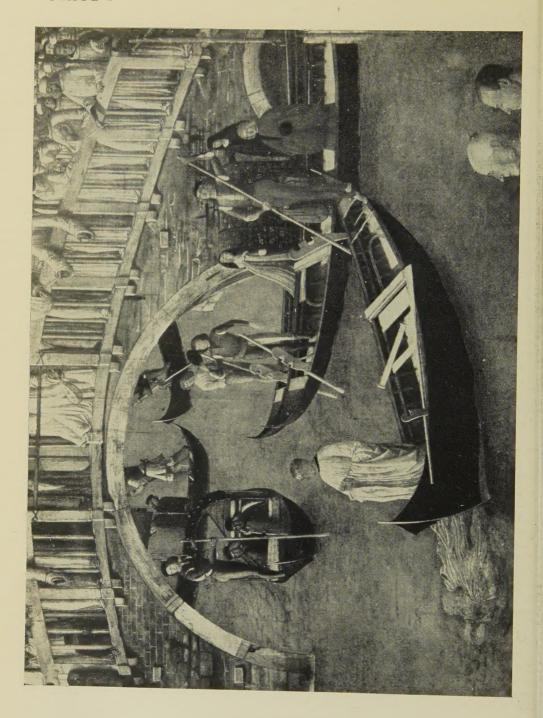
If we have come to devote our attention to the craft which still ply the waters of the Venetian lagoons and evoke their nostalgic memories, or we wish to examine their peculiarities, it is because we feel that the interest which lies in them is enhanced by the fact that in this mass-production and mechanized jet age, such boats should have managed somehow to survive, a few coming down

to us almost intact like living fossils from bygone eras.

How long they may hold out, nobody can say, for while a few still carry on quite satisfactorily the work for which they were designed, others have seen ungainly alterations brought to their hulls in order to meet the specific requirements of an auxiliary power, while more have been laid up, or left to decay in stagnating canals, or have found their way directly to the scrap yard. The time has come, we feel, that at least their features and their main lines should be preserved for posterity before they are all allowed to sail into oblivion. And this is precisely the task we are sequence.

A look at the landscape, which stretches on all sides from Venice, may explain the significance of the many widely different types of boats which in time have come into being there and make us better grasp the factors which stimulated or contributed to their shaping. We see in fact a long line of sand-banks inside of which are marshes and lagoons, criss-crossed by canals joining hundred





of islands, some inhabited, some not, maze-like swamps and mudflats with reeds waving in the wind, and barren dunes, and then the open plains to the west and the open sea to the east. Livy mentions succinctly this scenery which appeared to him and, which historians claim, was very much the same even long before his days, when wandering tribes of Paleoveneti still thrived upon the fringes of these marshes and caught fish in wicker baskets, a method which is still practised there, and gathered salt to preserve it when the tide was low. Water transport, then as now, must have played a very important part in their daily life, and it is therefore presumable that built-up shallow-draught boats were in use, though no records of them have come down to us, while strangely enough canoes hollowed from single logs were brought to light some years ago on the mainland near Venice, while similar ones were recently unearthed in the neighbourhood of Padua. But of course these findings should be ascribed to far earlier periods, as they show many affinities with the craft which appear in the rock-carvings of southern Scandinavia, a proof yet that primitive settlements were in existence here during the Bronze Age cultures, and show Man's earliest construction ability in disposing of trees in his quest for the unknown and perhaps reveal his first impulse to gaze seawards from these shores.

It is the opinion of some authors that these early settlers belonged to a race of people who had moved from the Ligurian region into the vast plains of northern Italy during the first Millennium B.C. and, as revealed by many archaeological findings, used to build their dwellings on piles driven into the mud, close to river junctions where goods and other commodities could be conveniently exchanged and transferred to overland tracks. By these routes possibly amber from the Baltic shores, and Attic earthenware and bronze situlae from the East found their way here, the latter being landed within the delta area of the great Padus River where the Etruscan harbours of Spina and Adria were already flourishing centres. Incidentally, it should be noted that the custom of driving beams vertically into the bed of rivers, or lying them flat over marshes in order to consolidate the foundations of their dwellings, seems to have survived to these days, for such is the prevailing

technique to be found in all the built-up area of the Venetian region.

It is impossible to state categorically any particular vessel which was evolved by these people, though it is probable that in time they contributed their share in the development of some kind of shipping, for we have the testimony of Livy's narrative about a piratical raid carried on the lagoons by Cleonim the Spartan in 300 B.C. and how it was successfully met by the inhabitants of

Patavium who defeated the invader by attacking him with their river boats.

During the first century B.C. Roman armies gradually moved into the Venetorum Angulus, by which name this land had come to be known, soon setting up the naval outpost of Aquileia on its most eastern border, later to be followed by Altinum, a municipium placed some miles northwest of where Venice was going to be, and close to where the River Piave once flowed into the sea. This harbour was to become a prosperous trading centre at the cross-junction of the Via Annia and the Via Claudia Augusta, as well as a pleasure resort for wealthy provincial citizens, as claimed by the poet Valerius Martialis (A.D. 38) who extolled her charms comparing them with those of Baia the glamorous city near Neapolis. But with the passing of the centuries, sombre clouds were to gather over the Venetian region, for the Empire was now torn by antagonisms and seditions while its eastern Italian provinces lay open to foreign invasions. A prevailing opinion amongst eminent historians admits however that, while Roman civilization was hopelessly doomed on the mainland, elements of Roman culture and municipal institutions were preserved for a long period by the populations of the Estuary, which were being augmented from time to time by refugees coming from the cities of Concordia, Opitergium, Altinum and Patavium, to seek shelter in these inaccessible sites. If so, it can be reasonably assumed that within this same area, uncontaminated by foreign influxes, elements of Roman nautical traditions were salvaged and preserved, later to be borrowed by Venetian master shipwrights. The development of these people into a maritime race, engaged at first in coastal trade and obviously acquainted with their home waters, caused the Greek Empire to seek their collaboration when the time came to wage war against the Goths who had come to settle down in Italy. Moving his armies overland from their Dalmatian bases up to the town of Aquileia, the Byzantine general Narses was hence successful to come swiftly upon the enemy's stronghold of Ravenna, by ferrying his men and their

impedimenta across the Venetian lagoons, mainly by taking advantage of the existing local flotillas and harbour facilities. With the Gothic power shattered in Italy in A.D. 552, the many settlements which were to form the Venetian City-State, later to be concentrated at Rialto, were now theoretically part of the Eastern Empire, governed by dukes, though soon to be a mere Byzantine enclave surrounded by waves of invading Longobard armies. The history of this period is mainly a history of a people who, faced with a mainland where opportunities for any immediate expansion seemed for the time hopelessly precluded, could only resolve to seek from the sea and from oversea trade the means for their subsistence. Their commercial instinct combined with proficient seamanship and aided by a favourable geographical position, were conducive to frequent commercial relations with the people of the Levant, for it is at this stage that really begins the great adventure of the Venetians and their drive to freight their vessels across the Mediterranean in search of wares and spices from the Middle East, and hence to find receptive markets for them in Central Europe. And this they achieved with great profit during many centuries to come.

The calm and sheltered waters of the Venetian lagoons proved to be ideal sites for the evolution of a shipbuilding trade which was gradually to grow from minor craft, designed to be hauled up on the beaches, to loftier sea-going carriers. Timber was abundant there at the time, oak being plentiful in the plains, while spruce, pine and larch covered the northern ranges, but could be conveniently flowed down the rivers which lead to the shipping yards placed along the edges of the Estuary. It is unfortunate that, while some substantial evidence of Roman shipping was revealed by archaeological findings within the area of Aquileia, little has come down to us relating to the very early Venetian craft and it is only from an enamelled plate belonging perhaps to the eleventh century A.D. (Pl. 1), preserved in the Church of St Mark, that we get a first glimpse of a one-masted trader, very similar as to the rig, as well as to the shape of the hull, to the vessels which appear in the Greek manuscript dated about A.D. 840, at present in the Bibliothèque Nationale of Paris. The outstanding feature of this ship is her triangular lateen sail, one of the earliest examples yet known, if we leave out the Eleusis relief now in the National Museum of Athens. This piece is claimed to be of Byzantine making and may depict a Greek vessel, and thus, by inference because of the strong and durable influence of Byzantine art and culture in Venice, we can assume that the early Venetian craft were built following the same lines. However, it is a known fact that the use of sea-going cargo-carriers and fighting galleys become more and more extensive, to a point when, during the early years of the ninth century, the safeguarding of the upper Adriatic came to rest almost entirely upon the Venetians, their naval squadrons being often called in by the anaemic Byzantine Government to check Slav and Saracen sea-raiders.

The centuries which were to follow saw the further steady building up of Venetian sea-power which was to last until the opening of new lanes of traffic in other parts of the world, and consequently the growth of rival merchant navies which brought the inevitable decline and fall of the

Adriatic City-State.

If today we possess some knowledge about those old freight-carriers which once upon a time handled the bulk of the Mediterranean trade and which were the pride of the Serenessime Republic, it either comes from the few surviving manuscripts left over by the shipwrights of the State Arsenal, or from the pictorial evidence of the masters of the Renaissance, but much of it too comes from what may yet be learned by closely examining the anatomy of the hulls, the local terminology and the ways of building which are to be found in those humble boats which still may be seen in their daily task of freighting wares and people across canals and waterways, more or less in the same way as they did during the good old days when the Doges were there and the crimson banner bearing the winged gold lion was flying at the mastheads of their ships.

Venice and the surrounding lagoons shelter today a host of craft which can be grouped into three main classes: the ware and good freighters, the passenger carriers and the fishing boats. However, they all have common basic features and show a continuity of design which was preserved because they were developed in conformity with local conditions which, up to now, were never subjected to external modifications. One point of interest, amongst others, is given by the way in which these boats are propelled, for the rower always stands in an upright position and never pulls at his oar, but pushes it forward by placing upon it the full weight of his body.

This system, which we believe is peculiar to the Venetians alone, was practised most likely since the early days when the stones of Venice were being set up to follow the strange pattern laid by the many canals and creeks which were to give shape to (let us call them so) her streets. It is an essential requisite in fact for every boatman to be able, all the time, to look in front of him in order to estimate the width of the road ahead and judge the amount of room he can spare when negotiating the sharp bends of the canals. Thus his oar must be continually shifted over the oarfork from one position to another, or at times taken more inboard, or laid alongside the craft's rubbing-strake, to 'draw water', or to fend away other boats coming from opposite directions. We know that things have been this way for centuries, for such they appear in the paintings by Vettore Carpaccio (1455–1525), where his oarsmen seem to be poised in the same way as they are nowadays, and it is only their gaudy attire which has changed, unfortunately not for the better.

The shallowness of the canals and of the lagoons, mainly when the tide is ebbing, was one of the factors contributing very largely to the shape given to these hulls. And how could it be otherwise when such boats are required to slide over the water as they do, or to swing around their own axis, or at times to be hauled up within the groundfloor halls (named porthegi) which are a common feature of most of the old Venetian houses, should they be hindered say by the presence of a keel? This brings us for a moment to mention the fact that boats and dwellings in Venice come to be closely related, the latter following very much the shape of a vessel which stands in the water, though it never will sail. This central elongated hall can be compared in fact with the main hold of a ship inside of which the Venetian merchants, who lived on the 'upper deck', once were known to stow away the wares and goods which they had imported, together with their own smaller craft. Later on when the City was to be no more the core of the trading world, the sea-lore was preserved in many homes where the tradition survived to draw up the gondolas in the portego and hang over its walls the naval relics in some way connected with the family history. Therefore it is not rare to still come across in some of the old mansions which have managed to withstand the vicissitudes of time, such things as lofty ship's lanterns, gilded stern and

quarter figures, or house pennants bearing the family's crest.

It would be vain to seek in local shipyards naval architects or technicians working over plans or blueprints, for seldom any draughts have ever been made and all that the Venetian shipwright needs today are but a few standard basic timber pieces and a few offsets, called sesti, for the shaping of the ribs, the use of which seems to have been known to his distant predecessors, as contemporary documents well prove. A process of construction, more or less similar for every type of boat, still follows the rules and methods laid down in the sixteenth century: 'You shall drive at both ends of the yard two piles three feet into the floor', says Master Baldissera Drachio Quintio, at one time a prominent foreman shipcarpenter of the State Arsenal, 'spacing them twenty feet apart', and he goes on to say 'that between these you will drive into the ground twelve more piles equally spaced and properly levelled off, for they are to form the base upon which the ship is going to rest'. Well, this is exactly the same way with which the present shipwright starts to build up his craft, the timber basis being named then as now, el cantier, which, it should be noted, becomes a permanent feature only in the yards specialized in the building of gondolas, the shape of which is at present about standard, whereas it is set up from time to time in the other shops where different kind of craft may come to be built, varying accordingly in shape and size. As a next step the builder will fix up the stem and sternpost pieces, followed by the three main frames which are then all lashed together by means of two sheer-strakes, which are called cerci, previously shaped off and bent on by fire. All the other ribs are then set into position and spaced at regular intervals. At this stage, commonly known as imboscatura, the boat is usually taken off its base and placed upon trestles, for now all the floor planks have to be fastened on, a procedure which is applied to boats of normal size alone, while when dealing with bulkier constructions, which are usually set over a higher building berth, the carpenter is able to accomplish his task by crawling under the bilge.

While gondolas are built in two yards which stand side by side in the quiet and secluded Rio dell'Avogaria, other squeri, for such is the Venetian name for them, may be found widely dis-

tributed over the City, or on the island of Burano, or again on that narrow strip of land which stretches south-east of Venice between the lagoon and the open sea, and where rows of gaily painted little houses, which seem to be holding hands, form the settlements of S. Pietro in Volta and Pellestrina and end up in the larger fishing centre of Chioggia. It is amongst these yards that

the last Venetian craft nowadays take shape.

All one has to do to learn about boats in Venice is to look out of the window or to sit at one's own doorstep and wait for the nautical display to unfold, for in the course of a few hours, quite a number of widely different craft are bound to go by, there being in existence at present twenty or more species and subspecies. Each type has its peculiarities and traditions, each type may display a number of strange features, reveal details of construction or decorative motifs, the primitive significance of which in many cases has been lost. The list is long, but the time is short and thus we can devote our attention only to a few, such as for instance the burchi. We may come across these boats in any part of Venice, or meet them way up the rivers and the canals which cut through the countryside, or find them being towed up the Po River or moored at the waterfront of some distant town in the Lombardy Plains. To a casual observer they may appear today as mere ugly and cumbersome, and crudely shaped barges, tramping along miserably under diesel power, for here, as everywhere else in these days, the hand of change has been busy in tearing down masts, and sails, and rigging, but on closer scrutiny the burchio will turn out to be the ancient and noble craft which has changed but little since the days when Pisanello was inspired by its beauty and depicted this vessel (Pl. 2) on the wall of the Church of St Anastasia in Verona, we are told some time around 1432, possibly as he saw her coming down the Adige River before the wind, with the sun striking full upon the great spread of her ochrous sail. She also appears on the well known large plan of Venice engraved in 1500 by Jacopo de'Barbari, about to enter St Mark's Basin and just passing between the Giudecca and the island of San Giorgio Maggiore. But though her pedigree can be traced beyond doubt to about 1340, the time when she is recorded by the Chronacae ascribed to the Doge Andrea Dandolo, it is highly possible that her line of descent can be set further back into time, for a Gallo-Roman marble relief existing at Cabrières-d'Aigues (France), pictures a very similar river barge loaded to the brim with casks of wine, having her ends coming up, a side paddle-rudder and two men towing her along an embankment. Another Roman relief discovered in Verona, and having possibly connexion with the Collegia Naviculari of that city, shows two vessels bearing very much the same features, an indication yet that along the Adige River water transport traditions were deeply rooted.

The Venetian cosmographer Vincenzo Coronelli, in his Atlante Veneto printed in Venice in 1690, praises these vessels as being the most convenient means of transport existing in the Venetian region and adequately suited to carry freight as well as passengers, adding that some of the burchi which he saw were 60 ft. long having a capacity to load a hundred casks of wine, besides a quantity of other goods. It seems that night accommodations were not provided, though passengers could bring along their own beds. Built on the same lines, but somewhat smaller, were the burchielli, known to have had a length of about 40 ft. and a width of 8 ft. They are worth recording for they assured a regular and rapid shuttle service between Padua and Venice, as the Frenchman De Brosse tells us in his Lettres describing his travel experiences when he arrived in Venice in 1739: 'Un fort petit enfant du vrai Bucentaure, mais aussi le plus joli enfant du monde comme nos diligences d'eau, mais infiniment plus propre, composé d'une petite antichambre pour les valets, suivie d'une chambre tapissée de brocatelle de Venise, avec une table et deux estrades garnies de maroquin, ouvert de huit croisées effectives et de deux portes vitrées.' The burchielli managed to survive the fall of the Republic in 1797, but all ended up in the scrap-yard when the railway

came to Venice; and that was in 1848.

The French naval archaeologist Jal, who visited Venice in 1841, says that some of the burchi which came from Verona (up to a few years ago a shippard, mentioned in documents of 1682, was still in existence a few miles north of Verona) differed from the Venetian ones by having both ends curved upwards, besides two side-rudders, their tillers leading up to the helmsman who was perched on a seat on top of the sternpost. The bizarre sheer of these craft however was kept up by somewhat similar barges which were built on the Po River and named rascone. We like to

mention them here because they were still a familiar sight in Venice until the last war, when they would usually take up their moorings off the Salute Point in St Mark's Basin, which was their terminal station after a long journey down the main Italian waterway. It was only yesterday and yet they are now but things of the past, and all we know about them comes from faded photographs and from one single plan which luckily was recorded by the French admiral Paris in his Souvenirs de Marine, and from which the only existing model was built.

We called on one of the old surviving yards which stands at S. Pietro in Volta on the Lido and which was set up before the end of the last century by one Benedetto Schiavon. The old man and his son Antonio still keep on superintending the work which occasionally comes to his yard. In the years gone by these slipways, which face the lagoon, were never devoid of vessels, for Schiavon could turn out any type of Venetian craft as well as sea-going schooners, while at one time his burchi were known to have taken to the water at the rate of one a month. Nowadays within this covered shed, only one fishing boat was taking shape, while on the nearby open ground an ancient burchio was on the stocks undergoing repairs to its hull. We climbed aboard this ageing vessel and looked down into her spacious holds. She belonged to the bigger types having a L.O.A. of 95 ft., 17.22 ft. beam and 6.6 ft. depth. A propeller shaft was noticeable at her stern while an auxiliary diesel engine was taking up much of the space of her after cabin, and gone were her masts and sails, but in spite of it all, she kept her old grandeur and one felt that her shapes had been conceived by shipcarpenters who had inherited the 'secrets' of their trade from generations of craftsmen. On deck we were shown the two fore bitts which are a peculiar and conspicuous feature common to all the burchi, no matter what their size was, and are fitted into a cross-beam which arches from side to side over the ship's nose, their true Venetian name being zuelo de prova, while the stern bitts, which are similarly inserted in a timber piece which follows the curve of the poop, are called zoja de poppa. We then moved between the logs upon which our vessel was placed and were shown the main bottom plank (passera) running from the sternpost to where the bow flares upwards in its trapezoidal shape. We could notice many more bizarre features, such as the freeboard markings on the ship's side, carried out by dots set horizontally in rows, starting with one dot at the waterline (half a foot), then two dots (I ft.), until five dots close to the gunwale was the indication of her maximum floating line. A strong iron hood called brocon covers up entirely the nose of this craft, ending with an olive-shaped prong which could well be a vestige of the iron spikes which were known to have been fitted to the beak of every Mediterranean galley.

Most of the burchi were fitted with two masts which come to rest on the deck, being held in position by iron fastenings fitted to the head of a stout post stepped inside the hull. They were made to unship when necessary. The foremast was much taller than the mizzen, though both hoisting lugsails bent on heavy yards and booms. Of standing rigging there was remarkably little, as only four shrouds come to support the foremast and three the mizzen. The yards were raised by a halyard purchase of two double-sheave blocks passing through a sheave hole in the

masthead.

The larger burchi have two holds for the storage of cargo and which take up some two-thirds of the vessel's length, being sealed off by a central compartment where the boatswain's locker is placed. The cargo space is covered by rows of rectangular and slightly curved hatches, the ends of which come to rest one over the hatch coaming the other upon a strongback extending all along the holds, while a waterproof tarpaulin is usually spread over them. At each end of the open waist, and separated by strong bulkheads, are to be found the crew's forequarters and the master's after cabin. The rudder is hinged to the sternpost by pintles supplemented by rope lashings passed through slots and worked by a block and tackle to assist in the lifting and the shipping of the blade. A heavy removable tiller is set over the rudder stock and fitted, sometimes with a tiller line to ease the pull on the helmsman's arms. The bottom to about the waterline is coated with tar and generally given a green colouring, while the sides are always black up to the rubbing strake which is often finished off in bands of blue, or red, or yellow. The deck and all the upperworks are given a coat of light grey or light blue, according to the owner's fancies, while more elaborate decorations with intricate designs and sometimes with religious motifs, are painted on the bow panels together with the oculi. A number of long and heavy oars having the tips of

their blades fitted with two iron spikes, are always kept on board and are used for poling, or

by driving them into the mud, to moor the vessel along river banks.

In spite of severe competition brought along by rail and road transport, a number of Venetian burchi so far have stood their ground and go on carrying their loads of stones, bricks, sand, cement and any other kind of granular materials. However, none is being built any more, while many of them are to be seen laid up in old yards where all work has ceased. There is ample evidence in fact that they are a dying type.

We come now to a group of lesser freight-carriers. They are divided into a number of varieties, some having differences apparently so slight that to the uninitiated they may be a source of confusion, primarily owing to the similarity of their names: there is in fact the batela a coa de gambero, the batela de Burano, the batelon, the batelo (or barchetta due pizzi) and finally the caorlina. The name batelo may have had some connexions with the Indian batel, though at present no similarity of shape seems to exist between the two. This name appears in a Venetian shipbuilding treaty known as 'Fabrica di Galere' dated about 1410, as well as in another Venetian MS of the sixteenth century which shows the outline of a boat having many points of analogy with the present craft, in spite of it being listed under the name of gondola. This coincidence made us suggest the possibility that such might have been the shape of the early gondolas from which the modern version was to come forth. The batelo, more commonly known nowadays as barchetta, has the length of a gondola, being about 35 ft. long, while her beam is 4 ft. She is built in the same way, though showing less asymmetry and a feeble list to starboard. At times she was known to have carried a rudder which was usually stowed under the after tilt-roof together with a short mast which was set passing through a hole in the fore thwart and upon which a lug sail could be hoisted. Of course when it comes to general appearances, this craft falls short of the gondola, having less sheer and lacking the smart iron prongs at the bow and all the other pretty frills which go into the nobler craft. We can consider the batelo as a 'cousin pauvre' of the gondola and a type which is dying out, a few specimens being occasionally seen at some of the ferry stations

along the Grand Canal.

The caorlina is a craft of archaic design and shows up in a number of paintings belonging to the Venetian Vedutists school of the seventeenth and eighteenth centuries, having preserved her features intact to our own days, the name suggesting a provenance from the fishing settlement of Caorle, north-east of Venice. They come in different sizes, the bigger types being built on the mainland along the River Sile in the neighbourhood of Treviso, and are recognizable by their unusual length and by having their gunwales finished off in different colours, though their hulls remain invariably black, while the medium-size ones take shape in the yards which are to be found on the island of Burano. As always the case with Venetian lagoon boats, keel and keelson are unknown, the longitudinal strength being provided by the usual sheer-strakes going from one end to another. The caorlina is a double-ender having stem and sternpost almost alike. She has tilt-roofs fore and aft beneath which the boatman will keep the bailer, the bucket, the cordage and the many other implements which go into every boat, and occasionally will serve as a cramped sleeping space for an unprovided hand. These craft can be rowed by one man alone or by more, according to the load and size of the cargo they are required to carry, though in the past they were often to be seen under a lug sail laying out their fishing nets in the open lagoons. Both ends are protected by iron bands nailed to the cutwater and to the sternpost, and may find their origin in the delfinis which show up in thirteenth-century MSS as being fitted to Venetian sea-going vessels. During the eighteenth century the caorline would lend themselves to be made up for festivities and water processions with embellishments and elaborate decorations built or hung over their sides, some of which were known to have been designed by such artists as the Tiepolos and Guardi, and were meant to portray episodes from Greek mythology or scenes related to the wonders of the Far East. From paintings by J. Heinz the Elder (1600-78) we learn also that on gala occasions it was an established custom to match together in regattas caorline manned by female crews. Similar competitions have been kept up to our days so that during the annual summer festivities which take place on the Grand Canal, the race of caorline (rowed occasionally by girls) is still a very popular feature.

A number of smaller light freight and passenger carriers which come under the generic name of sandali are yet in existence. One may find them carrying sight-seeing visitors, or freighting goods to the market, or employed in ferry service amongst the islands, or manned by a hunter and his dog going up narrow creeks between waving weeds in pursuit of game. The construction follows the general pattern of the other Venetian craft, showing a perfectly flat bottom, a gentle sheer ending in a V-shaped bow and a flat raking transom counter. At each end of the open waist are to be found the usual fore and aft tilt roofs, while a thwart is stretched across slightly abaft the main width. It was a common sight in the years gone by to see the sandali, a small lugsail set, come sliding before the wind with the man sitting upon the poop and steering with his oar tucked between the gunwale and the starboard oarfork. Of course those were things of the past, for nowadays all sails have disappeared, being supplanted by more efficient outboard motors. The average sandalo is rowed by one man who, by standing abaft the after tilt-roof, may propel his craft with two oars. His arms are crossed so that his right hand works the port oar, while his left

hand pushes the starboard shaft, this arrangement being known as alla vallesana.

From the many varieties in existence, we have picked out for closer examination the sandalo pupparin which may be considered the aristocrat of its kind, and one in particular upon which the builders (in this specific case the people from the Tramontin yard who are known for the high quality production of their gondolas) profused all their skill and care, and turned out indeed a thing of beauty. In general appearance and construction this pupparin is but an elongated normal sandalo having a length of 31.6 ft. with a 3.8 ft. width, though on closer scrutiny it will be noticed that the hull bears the same asymmetry as that of a gondola, her left side being larger than her right side, the purpose of which is again to slow down the impetus caused by the first forward stroke of the starboard after oar, which alone would bring the boat's head to swing sharply to the left. Another feature which makes this craft different from all the other sandali, is the fact that the rower stands upon a platform placed over the left side of the poop, and hence the name of pupparin; while the forward rower, when there is one, stands abaft the fore tilt-roof. The oarforks, carved from solid blocks of walnut, differ in shape from those which go in the gondolas, the after one having two catches (morsi) instead of one. An olive-shaped spike comes out from the bow and is held into position by three very conspicuous nails, while five more are placed over the iron band which curves around the stern. This type of sandalo may display the side bronze seahorses, the leather plush-trimmed seats, fancy wicker chairs as well as all the other fittings which go into a gondola, though differing from the latter by the colouring of the hull which is left in the natural shade of the wood. Not more than three or four craft of this kind are left in existence and very likely none will ever come to be built.

Before we come to an end of this brief survey of Venetian shipping, we believe that two special vessels, belonging to local rowing clubs and built purposely for gala occasions, should receive a word of mention, being unique of their kind. Their names derive from the number of oars which go into them, and thus la Dodesona of the Bucintoro Rowing Club has twelve oars, while la Disdottona with eighteen oars is the property of the Querini Rowing Club. On the rare occasions when these two craft are taken out from their sheds to be manned by smartly dressed crews and the Grand Canal is for once free from the blatant and devastating turmoil caused by an everincreasing motorized traffic, it is a magnificent sight to watch these two boats looming up with their bows cutting through the water and their oars thrashing in rhythm, the 'tempo' and the

steering being accomplished, without the use of a rudder, by the stern rower alone.

It is inevitable, we think, that with the march of time and the advent of cheaper ways of propulsion, these age-old wooden craft, with their wealth of beauty and traditions, are hopelessly doomed and will soon make way for the new steel and plastic models of the present age.

At the close of the lecture the Chairman said: 'I would like, in your name, to thank our guest for giving us so supremely interesting an afternoon's entertainment. Speaking for myself, I do not know which to admire most, the lecturer's erudition, the beauty of his models and slides, or the

perfection of his English. I feel sure your sentiments here coincide entirely with mine; and so I will ask you to express them in the usual manner.' The vote of thanks to the Lecturer was carried with acclamation, and the meeting then closed.

A DRAUGHT OF A JACOBEAN THREE DECKER. THE PRINCE ROYAL?

By W. Salisbury

HE earliest draught in the collection of the National Maritime Museum (No. A 193) is a mutilated pencil drawing, from the waist forward, of the sheer and floor plans of a three-decked ship-of-war This came to the Museum at the same time as another early draught, in colours on vellum (No. A 192) which represents a smaller ship and which was once in the possession of Lord Dartmouth, d. 1691.

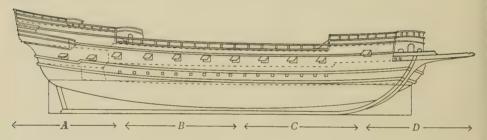


Fig. 1. Draught on vellum.

The vellum draught (Fig. 1), which measures 33 in. by 15 in., has been folded into four equal sections by three vertical folds. Originally the pencil draught (drawn on two sheets of paper glued together in the middle) had been used as a mount for the vellum, to the back of which it had been pasted face down. Being larger than the vellum, the stern and after upper works of the paper draught were probably trimmed off at that time. It will be easier to describe the subsequent mutilation if we name the four sections of the vellum draught, working from the left or after end, as sections A, B, C and D: the join in the paper draught came almost in the middle of section B. In recent years the two draughts have been separated, but in the process—probably before it was realized that the paper backing was not

plank—the whole section of the paper behind A, and the half section between the join and the fold between B and C, have been lost. After separation, the two surviving parts of the draught had been brought together and the whole mounted on paper and drastically ironed or pressed.

In spite of the somewhat sketchy and unfinished nature of the draught, ts age and subject make it of sufficient importance to attempt a reconstruction of the missing portions. In its present state the waist is clearly far too short; the position of the midship frame is lost; and we do not know the ength of the keel or the number of ports on each of the three decks. The only definite dimension is the half breadth, and no scale is indicated.

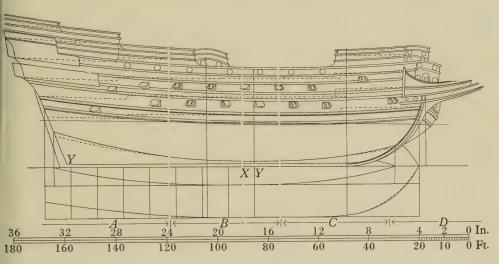


Fig. 2. Reconstruction of a draught, possibly of the Prince Royal.

A satisfactory reconstruction of the major details is however possible, and the result is shown in Fig. 2. The first step was to make a careful tracing from a large-scale photograph, and this operation revealed the extent to which stretching and distortion had occurred during the pressing or ironing mentioned above, and also brought to notice one or two instances in which the original draughtmanship had been carelessly carried out. As much of the reconstruction depended upon accurate measurements from the draught this distortion must not be overlooked.

When the tracing had been completed, it was a relatively simple matter to decide what distance the two portions of the draught should be separated at the join in order to make allowance for the smaller of the two lost sections. This was made possible by the vellum draught still showing traces where

the join in the paper draught had been pasted, and by checking this with the relative positions of identifiable worm holes in both paper and vellum. The reconstruction in the waist is entirely reliable and agrees perfectly

with what remains of the ports and port lids.

The next step was to ascertain the position of the midship frame in the reconstructed section. A strong possibility that its distance from the touch should equal the whole beam (point X) was immediately seen to be wrong, as the rising and narrowing lines of the floor could not become tangents to the keel (or a line parallel to it) at this point. The only two vertical lines in the sheer plan are at the touch and near the main drift, and are of little use. In the after-part of the floor plan, however, are three equidistant verticals which can only represent the positions of frames in the after-body. If a fourth is drawn, at an equal distance towards the midships, it is certain that this will fall on the position of the missing midship frame (point Υ).

Using the same intervals, or 'room and space', the positions of the remaining frames in the after-body can now be ascertained and drawn in Since it appears to have been almost the universal contemporary practice to divide the distance between the wing transom and the midship frame into a number of equal parts in order to obtain the positions of the frames, it is a fair assumption that in the present draught the wing transom would lie on one or other of the stations now drawn. It was also the usual practice for the midship frame to be placed one-third of the keel from the touch, or to be very near to that point. Setting off double the distance Υ -touch from the midship frame aft, the foot of the sternpost would stand at point Υ' , and the wing transom at the next frame aft. The actual rake can only be drawn when the height of the wing transom has been found, and this will depend upon the height of the lower wale aft.

At this point may be mentioned the vertical line drawn near the main drift. Although this extends over both the sheer and floor plans it appears to serve no useful purpose in the design, and it may represent the position of the main mast. Whatever its function, it is significant that it stands exactly half way from the touch to the assumed position of the post at Υ' .

As far as I am aware, the sheer of the wales was invariably drawn as an arc of a circle from stem to stern. Sufficient of the draught remains to make it possible to measure the rising of the wale at various points and to calculate the radius of its sweep. This works out at about 16.59 ft. beam, and the lowest point of the wale is 0.27 ft. beam before the midship section. This radius is the longest which can be used, and in view of the distortion of the draught in various places it should probably be a little shorter and the sheer of the wale aft a little higher. For reasons still to be mentioned, however, it will be preferable to ensure that the sheer aft is kept as low as possible for

the time being. The upper wales are not quite parallel to the lower, and are a little wider apart forward than in midships. It is probable, however, that the sweeps of all the wales were meant to be concentric. Now that the height of the wing transom is known, it is possible to draw a line from \varUpsilon to represent the rake of the sternpost. This works out at 20° from the vertical, and agrees very closely with normal practice.

Although the wales were certainly drawn as arcs of circles, it is less certain that the same applied to the rising and narrowing lines, which might be elliptical or generated in some other manner. Fortunately, in the present draught these lines in the forebody can be identified with some confidence as actually being arcs of circles. In fact, all the lines round a little more than true arcs tangential at the midship frame should do, and although this may be due to distortion, there is I think another possibility.

Except for the use of a very large beam compass or some other such contrivance, a definite arc of any geometrical curve can only be drawn on paper either by constructing a special 'curve' to guide the pencil, or by calculating several points through which the line must pass and drawing it with the help of a flexible batten. The labour involved in making a special 'curve' to draw each single line puts the first alternative out of the question, whilst it is quite certain that in this instance the rising and narrowing lines have not been drawn through a series of calculated points. There has in fact been no attempt to draw the station lines on which such heights and breadths would be calculated. It is therefore probable that the designer had a set of 'curves' of various radii, and used that one which was closest to his requirements. The slight error on his plot would not be material, as the heights and narrowings in the mould loft would be obtained directly by calculation without reference to the draught except for the points of greatest rising, etc.

Working on this hypothesis, since the actual ending of the lines at the midship frame have been lost, it appears that the rising of the floor fore and aft had originally been swept with a radius of about 7.29 ft. beam, and then lifted slightly at the gripe. If the same thing has happened in the after-body the original and amended lines would run as indicated, and these appear

quite reasonable.

The narrowing of the floor forward is an arc of radius 4 ft. beam. The narrowing aft obviously does not commence at the midship frame, but (probably to give more displacement) seems to start at a point a little abaft the first frame aft of midships. If this is actually the case, an arc of radius equal to that of the rising of the floor, 7.29 ft. beam, would agree with what is left of the narrowing line and meet the tuck at the desired distance.

The main breadth forward has been altered to give more bearing, and is swept from the stem aft with an arc of 0.88 ft. beam whose centre is 0.38 ft. beam from the middle line. Forward of midships it runs straight for about 0.57 ft. beam before it curves in to meet the harpin sweep. The main breadth aft is more difficult, as not only is there no clue to the narrowing at the wing transom, but also the sweep has been carelessly drawn so as to cross the breadth line near midships. After making some allowance for this, an arc of roughly 12.6 ft. beam as shown would make the breadth of the wing transom about two-thirds of the beam. In fact, I think the narrowing aft should be far more than this.

A waterline had been drawn in the position indicated, and then erased, probably in connexion with the alterations in the rising and narrowing lines. Before this was done, however, the ports had been drawn in, and these run in a straight line parallel to the waterline. The decks, however, apart from a very slight rise fore and aft, run parallel to the keel, and this results in the height of the ports increasing as they go aft. This is probably

incorrect, but no attempt has been made to rectify it.

The rises in the decks forward make it probable that there were falls aft, and this supposition is supported by the position of the ports in the surviving sections of the draught. As drawn, only one more port can be added on the lower and middle decks aft unless they are to cut the wales. This would be even more apparent if the sheer of the wales aft were to be increased, as mentioned earlier, or if the ports were redrawn to run parallel with the decks. The aftermost ports, and therefore the decks, must therefore be dropped. It will be noticed that there would actually be room to place two ports on the lower deck without cutting the wale, but that the second of these must be omitted in order to clear the fall made necessary in the middle deck above it. On the upper deck the round ports follow the wales, and the only reason for a fall is to give more headroom in the great cabin, similar to that shown in the vellum draught. On the whole, I think that the three gun decks should rise aft so as to run parallel with the ports.

The suggested outlines of the counter, quarter galleries, and after drifts are of course pure guesswork and are probably very reminiscent of the *Prince Royal*. This is simply because I know of no other early three-decker to use as a guide. It may also be thought that the drifts aft are too short, and their hances placed too far aft. This also is possible, and the explanation may lie in contemporary conventions in draughtmanship. The common practice of drawing in a part of the far side of the bow is harmless, whilst that of showing the flat of the various bulkheads is a positive gain. At the stern, however, it frequently happened that the whole of the quarter was drawn well abaft the head of the stern post, the lower wale being continued

at perspective meant that the distance from stem to quarter piece is far clonger than it should really be, and the whole of the associated details of the quarter and broadside is stretched out to the same extent. This feature can be seen in the sketch of the vellum draught and in all the draughts in Dudley's Dell' Arcano de Mare. What rule, if any, lay behind it I do not know.

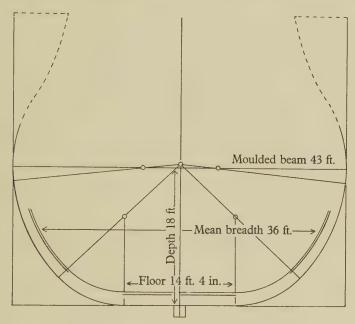


Fig. 3. Suggested section of the Prince Royal.

Both the draught on vellum and that on paper are, I am confident, by the same hand. Not only are the general details similar, but the slight forward rake of the beakhead bulkhead and the treatment of other details in the head are, allowing for the difference in material and finish, identical. Since the draughts were separated the vellum has shrunk, or the paper stretched, but it can be proved by its scale that the draught on vellum was drawn to a scale of $\frac{1}{5}$ in. to the foot. As the scale of the paper draught must be either $\frac{3}{16}$ or $\frac{1}{5}$ in. to a foot, I think it permissible to assume that the latter is the case and that both draughts are to the same scale.

The decoration of the vellum draught includes the cypher of Charles I, and the ship, although unidentified, probably represents one of the many projects for a fast light vessel put forward at various times during that reign. The exact date is relatively unimportant, as for the present purpose it is

sufficient to assume that at the time this draught was completed, the paperr draught was regarded as obsolete and completely useless except as a backing for the new draught.

It is now time to try if possible to identify the vessel shown in the draught: on paper (Fig. 3). First of all, the ship has all the characteristics of a vessell of the time of James I. Secondly, it was probably 113 ft. keel and 40½ ft. beam moulded, or close to those figures. Thirdly, it was a full three-decked ship. If the draught represents any ship actually built, on these grounds; alone the Prince Royal of 1609, 115 ft. keel by 43 ft. beam, appears to be the only candidate. When compared with Vroom's painting of the ship in 1623 the resemblance is even more striking. The unusual 'stepped' arrangement of the beakhead bulkhead appears in both, and the number and disposition of the ports agree exactly. It is true that the painting shows a rounded bulkhead, and flush decks forward with one extra port on each of the decks forward where the draught has gaps, but we also know that by the time the painting was made the cookroom had been moved from the hold to the forecastle during a refit costing something under £,1000, and it is quite possible that her decks were made flush and new ports cut at the same time.

The earliest dimensions we have for the ship date from the survey of the Navy in 1632, and the following figures are taken from Sergison MSS 135:

		The old list of	According to the	
Prince Royal		H.M. ships	Old rule	New rule
Length	Length Length of keel less false post	115 ft.	— 115 ft.	— 115 ft.
Breadth	Breadth	45 ft.		_
	Greatest breadth within the plank	_	43 ft.	-
	Mean breadth within the plank at half the depth from the ceiling to the height of breadth	_	***************************************	36 ft.
Depth	Depth	17 ft.		
-	Depth from the breadth to top of keel		18 ft.	. -
	Depth from the breadth to ceiling	_	_	16 ft. 3 in.
Divisor		100	100	65
Tonnage	Burthen	. 879	890	1035
	Tons and tonnage	1172	1187	1380

These dimensions are of course slightly larger than those of the draught, although the depth fits quite well. It should, however, be remembered that

the scale of the plan is uncertain, that in any case it is only a rough draught, and that the finished plan may have been altered. It is also a possibility that the draught was made—perhaps by one of Pett's rivals—during the controversy which raged over the ship's design during the time of her building. The various arguments are discussed in full in Perrin's edition of Pett's *Autobiography*, and although the details do not help towards identifying the sheer or floor plans they fortunately give some idea of the shape of the midship frame, which is missing from the draught.

The principal criticisms of the design in 1609 were that the harpins, or fore end of the lower wale, were too rounded; that she had too much floor; and that the lower and upper sweeps were too long and the middle sweep too short. This points to Pett having given her a much fuller body than normal, in order to carry the heavier weight of armament and topside made necessary by the third deck, and the alterations to the rising and narrowing lines of the draught must have been made for the same purpose. One definite point settled by the enquiry conducted by the King was that the 'square of the floor' or 'square of the ship's flat in the midships' (Pett's words) was 11 ft. 8 in. instead of the 13 ft. claimed by his opponents. Perrin thought that this dimension was the breadth of the floor, but as the point at issue was settled by the judges finding a difference of '16 inches at the runghead' it is apparent that the argument affected some dimension connected with the rounding, rather than the flat, of the floor, and that in any case the proof concerned the half breadth rather than the full breadth of the floor. Probably 11 ft. 8 in. was the radius of the floor sweep.

Whatever the true facts of the controversy may have been, it is significant that if one takes the half breadth of the floor from the draft (7 ft. 2 in.), the lower sweep from the Autobiography (11 ft. 8 in.), and the various dimensions from the Survey of 1632 (the mean breadth of the new rule was taken inside the inner plank or ceiling, S.P. 16/35; 39) it is possible to draw out a fair midship section which has exactly the innovations which were criticized in 1609. For what it is worth, this midship section is reproduced. It is unexpectedly full for a Jacobean vessel, but has the merit of agreeing with what we know of the ship.

To sum up, I have a strong suspicion of attempts to link unnamed relics with the names of famous ships, and the odds against finding a draught of an early Stuart ship are in any case very long indeed. In this particular instance, however, it seems certain that the draught has at the very least some connexion with the *Prince Royal*, and I would have no hesitation in using it to reconstruct her model.

THE MUTINY OF THE CHESTERFIELD

By Commander W. E. May, R.N.

N 8 October 1748 the Chesterfield anchored off Cape Coast Castles. She was a ship of 44 guns and 250 men and was commanded by Captain O'Brien Dudley. Before she left England in the previous February, Captain Dudley had received orders to visit our forts and establishments on the west coast of Africa, surveying them and reporting on their strength and condition. When provisions ran short he was to go to the West Indies. On arrival at Cape Coast Castle the Captain was invited by the President and Council to live ashore during his stay, together with as many of his officers as possible, for it was felt that the presence such guests would enhance the prestige of the residents among the natives.

Captain Dudley accepted the invitation and moved ashore with the 2nd and 3rd lieutenants, William Foster and Charles Middleton. Others came and went between the ship and the shore and on the 15th of the month the Captain invited the Master, Thomas Hammond, who was in poor health, to dine with him. Accounts vary as to how many were ashore that day but there seem to have been about fourteen, besides the officers mentioned above. These included five midshipmen, the purser and the surgeon's

mate. The surgeon had died a little while before.

Just before 6 o'clock in the evening the barge was sent off with a message to the 1st lieutenant that the boatswain was to come ashore in the cutter to strike a tent and that the ship would sail next day. Instead of obeying orders Lieutenant Samuel Couchman had the barge hoisted and then called all hands aft. Brandishing a sword, which belonged to one of the other lieutenants, he told the men that they could no longer put up with the treatment meted out to them by their Captain and that he would take the ship to sea that night and run away with her. A few of the men produced arms and the majority of the crew, carried away by the enthusiasm of the moment followed the carpenter, Thomas Knight, in giving three lusty huzzas Couchman and about fifty men threw their hats into the sea, vowing that they had no more need of old hats as they would soon get themselves better ones. The carpenter's hat fell into the long boat, which was secured asternand was recovered next morning.

Seeing that Roger Gastril, the boatswain, and Thomas Gilliam, the senion

Master's mate, stood aloof, Couchman asked them for their support, blustering that he would 'take, sink, burn, kill and destroy' and would settle a colony in the East Indies. These two officers refused to take any part in the mutiny and were confined in irons under a guard of five men, together with two midshipmen, Banks and Martin. Some of the men were scandalized at a warrant officer being placed in fetters.

The ship was then got under way admidst much confusion, the lieutenant shouting that if the anchor could not be weighed it should be cut away as they had plenty more at the bows. It was however weighed in the end, though most of the men were loathe to man the capstan bars until driven to them by the armed mutineers. Everyone then had a drink and the ship settled down for the night. Who set the course is not related.

By this time reaction had set in and many of the men were beginning to worry about what would happen. Sergeant Francis Parker went to Lieutenant Morgan of the Marines and told him that his men were not disaffected and would obey his orders and carry out their duty. Morgan replied that they must obey Couchman who, as their superior officer, could do nothing wrong.

Daniel Long, a boatswain's mate, then approached his superior, telling him that about three-quarters of the crew were really loyal and would follow the boatswain if he would give them a lead. A little after this Couchman thought that, as the ship was now at sea, it would be safe to release his prisoners, so had them brought down to the cabin, where they found him drinking with the Marine officer, the carpenter, two midshipmen and David Frazier, another Master's mate. It is difficult to see why the last three had not been confined with the boatswain, since they had taken no part in the mutiny. Perhaps Couchman thought them of no consequence. Indeed one of the midshipmen, Matthew Kitchen, seems to have spent most of his time weeping copiously. Everyone in the cabin had drinks while the more ardent mutineers among the crew were carousing in the gunroom.

At last even the officers turned in and at 7 o'clock next morning Couchman again called everyone aft. He asked the men if they would go with him to the West Indies and they all seemed to acquiesce.

At noon, Couchman invited Gastril and Gilliam to dine with him in the cabin. The former tried to reason with him and Gilliam asked why he had changed his destination from the East Indies to the West. The lieutenant claimed that he had been too drunk the night before to know what he was doing and that in that state had been forced into the mutiny by some of the men. Nevertheless, he continued to rail against the Captain and refused

to turn back. He said that the ship was short of provisions and must go to the West Indies for them. The Captain had planned to keep the ship on the African coast until Christmas and they would all have starved.

After dinner the boatswain went to consult the gunner, John Salmon who was confined to his cabin by an attack of rheumatism. A council or war was called in this little cabin and was joined by the two Master's mates Kitchen (still in tears), the gunner's mate, his yeoman, the cook and the coxswain of the barge. The gunner's yeoman produced twenty pistols which he proceeded to load with the assistance of the cook, and as soon as it was dark they all moved forward, talking to the more reliable men These readily agreed to join in the attempt and with their aid the ringleadeer of the mutiny were soon seized, clapped into irons and spiked down upon the forecastle. Those seized in this manner were Lieutenant Morgan, Knight the carpenter, and nine men. The 1st lieutenant was at first left at liberty Gastril having qualms about the propriety of confining a commissioned officer. When morning came, however, the ship's company insisted that it was the only safe thing to do and the boatswain told Couchman that la was under arrest. Couchman asked leave to address the ship's company again and though one would have thought that it was rather rash he was allowed to do so. He wept and protested that he had been forced into the mutiny by the wickedness of others, but no one believed him.

The question now arose as to what they should do next. The boatswair having taken command would have liked to return to Cape Coast Castie for the Captain and would thus have soon got rid of further responsibility Unfortunately he knew no navigation and had to rely on Gilliam who tole him that it would be impossible to beat back against the wind and that the must go to the West Indies, where they would find another man-of-war to take charge of the ship. No log was kept so their movements are not recorded but the Chesterfield seems to have arrived safely in Carlisle Bay, Barbados on 2 December. One of the mutineers had died at sea. At Barbados there found Admiral Henry Osborn, Commander-in-Chief of the Leeward Islands Station, in the Ludlow Castle. Since Osborn had just been ordered home with the greater part of the fleet and did not want to be delayed or the station he decided to appoint new officers to take the Chesterfield to England for the necessary courts-martial. Before he was ready to sail however, a merchantman came in from West Africa bringing two of the petty officers who had been left behind at Cape Coast Castle. They reported that Captain Dudley and the rest of the party had left the coast two days earlier than they in a ship bound for Antigua. As Osborn expected that the Captain would arrive at Barbados in the course of a day or so, he can celled the appointments which he had made with the exception of that o Lieutenant Jack Christian of the Ludlow Castle as 1st lieutenant of the Chesterfield, vice Couchman.

Admiral Osborn sailed for home in mid-December 1748 and his relief, Commodore Francis Holburne, left Plymouth in the Tavistock on 13 February 1748/9. In her the Admiralty sent out Captain James Campbell to take over command of the Chesterfield from Captain Dudley. When Holburne arrived on the station he found that, contrary to expectation, Dudley had not resumed his command until 8 March. He with ten companions had come from Africa to Antigua in the Molly, a snow, part-owned by a Mr Cust who subsequently claimed £12 per head passage money and £35.95.0d. for feeding the party. The Admiralty refused to pay more than the provision money and £8 apiece. How the other members of the crew returned we are unlikely ever to know. The mutineers destroyed the original Muster Book, and though Lieutenant Christian kept a book from the time he joined until the end of February there is after this another gap in the series until mid-April. By this time all had returned except the surgeon's mate who seems to have remained in Africa.

The prisoners had been distributed between the *Chesterfield* and the *Richmond*, 20 guns, Captain James Sayer. Captain Sayer reported that Couchman had tried to stir up another mutiny in the *Richmond*, but had been thwarted. Holburne told Sayer that he must be very careful on the voyage home that the two ships never lost sight of each other, and for greater security put on board a number of Marines whose regiments were being disbanded. The ships sailed on 30 April and reached St Helens

safely on 14 June.

A series of courts-martial was held on board the *Invincible* at Portsmouth in June and July 1749, Vice-admiral Sir Edward Hawke, the Commander-in-Chief at Portsmouth, presiding. Captain O'Brien Dudley was tried first, charged with 'neglect of his Duty' and 'not only being on shore himself, but permitting soe many of his Officers and Men' being ashore '& suffering the Dishonour of his Majs ship being run away with that was entrusted to his command'. He successfully pleaded that he had had no expectation of trouble and that he had acted in accordance with his orders. He was acquitted, though a proposal to reprimand him for not having sent the two lieutenants on board at night was defeated by the narrow margin of five votes to four. He was lucky. By his orders he was not to 'suffer your officers or men to lye on shore'.

Samuel Couchman's defence was that he had been continuously drunk from Coronation Day on 10 October until the 15th and that drink made him 'lunatick'. He had not known what he was doing on the night of the mutiny, which was entirely the work of John Place. This man was a murderer

and an ex-pirate who had sailed with Bartholomew Roberts and had beem with him when he had been taken by Captain Chaloner Ogle in the Swallowa in February 1722/3. In Couchman's view it had been he, Couchman, who tried to persuade the boatswain to recover the ship on the 16th; he who loved the Captain while Gilliam could not say enough against him; he who wanted to go back after the ship had been retaken and Gilliam who insisted on taking the ship to the West Indies.

It is indeed curious that no questions were asked by the Court as tor why the ship had not turned back. In October the wind on the West Coast of Africa usually blows from between south and west, while a strong current sets to the eastward. Both would have helped her to get back to Cape Coast Castle without undue difficulty. Why did Gilliam vote for the West Indies? It is an intriguing question which will never be answered now. Couchman's allegation that the Master's mate was in fact one of the leading spirits of the mutiny is sufficiently disproved by the evidence.

Couchman's defence availed him nothing and he and the Marine officers were sentenced to be shot. Lieutenant Morgan of the Marines had take to no active part in the mutiny. His manner was more that of the enthusiastics supporter of a football team from the touchline. Midshipman Lacey, however, gave evidence which suggested that there must have been some earlier understanding between the Marine officer and the 1st lieutenant. Lacey claimed that he had overheard Couchman tell Morgan that three days before the mutiny he had signalled to him by hoisting the topsails and that if the Marine officer had understood and had come on board they would have been off then.

Thomas Knight, the carpenter, had always been an intimate crony off the 1st lieutenant and they had been seen drinking punch together during the days before the mutiny. Afterwards he had styled himself 'First Lieutenant' and had become involved in an altercation with John Place, the carpenter's mate, who also claimed that honour. He could not see that he had done anything wrong in obeying whatever orders Couchman had given him and he was sentenced to be hanged.

The next court-martial dealt collectively with Matthew Kitchen, Midshipman, Alexander Cowey, Thomas Nash, John Bermingham and Henry Haines, able seamen, and John Betties, a private of Marines. Of these only Haines was found guilty. He had been seen brandishing the Captain's mourning sword and wearing it stuck through the buttonhole of his frock. He had been heard to say that when he had made his fortune he would have his mole cut off. His defence that he had been drunk and did not know what he was doing did not help him.

The midshipman had been nearly frantic with fear of bloodshed and

no one knew how he had come to be charged; Cowey had promised the boatswain his support in any attempt to retake the ship; Betties had obeyed the sergeant's order to stand sentry over Gastril and Gilliam; for or against the others there was no evidence.

John Place, the carpenter's mate, was tried alone. There was no doubt that he had taken a leading part in the mutiny, second only to Couchman, if he had not as the latter averred led his officer astray. He admitted his misdeeds and threw himself on the mercy of the court who condemned him to be hanged. It is not possible to prove or disprove Couchman's story that Place had been with the pirate Roberts in 1722. The Swallow's Muster Book with its list of prisoners cannot now be traced and in any case he would most certainly have been going under another name.

Next, Thomas Dixey, John Bennet, William Meeks and Robert Poor, able seamen, and Benjamin Attwood, a private of Marines, were tried together. Meeks and Poor were condemned. These were followed by five more able seamen, Thomas Scott, John Reed, William Dumbleden, Walter Barker and William Anderson of whom only Barker escaped conviction. John Reed was evidently another ringleader. He had been seen drinking Couchman's health and had styled himself 'Second Lieu-

tenant' while Scott had appointed himself 'Boatswain'.

One more court-martial remained to be held, that of four seamen from the Richmond, Thomas Ferryman, James Colvin, James Brown and Thomas Godfrey. According to William Westbrook, one of the Chesterfield mutineers, who gave evidence against them and in consequence was not tried, he had pretended to sympathize when Colvin told him it would be easy to run away with the ship and had talked with the three others and with Place. Three days later Couchman told Westbrook that he had received a letter from Ferryman and seemed to agree with the plot. There was more talk, the password 'God speed the Plough' was agreed upon, and Colvin obtained keys to the arms chest. Then on I March someone, probably Westbrook, warned the Captain who sent the Master, William Couch, to search for papers. He caught Ferryman red-handed with a paper in his fist, and though this was torn it was put together and produced at the trial. It read:

Articles agreed on and affirm^d by us whose names are undermtoned to be upheld and stood by on the following Occasion. to w^h we here sighn our names as Affirmatives to the following Affair this 1 Day of March 1748: That we are bound by these Articles to Stand & not faill each Other in Releiving thosse who at present are nessesiated for Releive nott only so Butt Our Own Advantage & by a full and hearty Consent we agree to Make if Possible this Ship our own by Confining All the Principle Officers & seizing the Advantage at the first Opertunity on w^{ch} we are Ready to Venture Lives as V

Tho^s Ferryman

Jams X Colvins Mark

Ferryman had a good character and tried to make out that he had gone into the business to spy on the plotters, but he did not convince the Court

and he and Brown were duly sentenced to death.

The Commander-in-Chief at Portsmouth, Sir Edward Hawke, was instructed by the Admiralty to reprimand Captain Sayer of the Richmona for his carelessness in allowing Lieutenant Couchman to be at liberty, thereby endangering the safety of his own ship. In reporting the results of the courts-martial, Sir Edward recommended mercy for the lieutenant of Marines. 'Compassion excites me to address their Lordships in behalf of that unfortunate person, Lieutenant Morgan, now under sentence of death. He was but little acquainted with Sea Service, is extreamly weak and ignorant. Besides he has a Wife and several small children, whose bread depends solely on him. It is true his crime was heinous; but I would! fain hope, that the above considerations might induce their Lordships to intercede with His Majesty graciously to spare his life.' This please had no effect but five men were reprieved and set at liberty. These were Haines, Meeks, Poor, Dumbleden and Anderson. Thus, in the end. only the three officers and the three ringleaders, Place, Reed and Scotti suffered the death penalty. Couchman and Morgan were shot on board! the Chesterfield on 14 July. The carpenter and the three ratings were hanged! on the 24th and Ferryman of the Richmond on the 26th, Brown being reprieved. These executions also were carried out on board the Chesterfield. According to the custom of the day the reprieved men were not told of their fortune until the rope was actually about their necks.

While he was waiting for death, Place passed the time writing letters of religious exhortation to his fellow prisoners. To Couchman he wrotes that the Lieutenant was the murderer of them all and should not try to shelter himself by putting the blame on others but should die like a man; to which Couchman retorted, 'You will die like a villain'. Place also wrote to Sir Edward Hawke assuring him of the innocence of several of those acquitted and accusing three men who had remained in the West Indies of having taken a leading part. He also admitted that he and Couchman had discussed the possibility of going pirating several days before the mutiny. One has no idea who were the three men named by Place. Before the ship came home eight men were discharged to the Speedwell and two to the Tavistock while two more deserted and another died.

Such is the story of the mutiny of the *Chesterfield* as told in the documents that have come down to us. Why it occurred is a mystery, for though there was some talk of an anonymous letter having been handed to Captain Dudley some time before the arrival at Cape Coast Castle no one produced any real complaint against the Captain during the trials. Couchman ad-

mitted that he had been in some trouble in a previous ship but what it was we do not know. He first comes to our knowledge when he joined the Russell as a midshipman on 26 June 1739, but this is unlikely to have been his first ship for in the next year he was rated Master's mate and on 31 October 1740 Rear-Admiral Sir Chaloner Ogle, who was at sea with a fleet in the West Indies, promoted him Lieutenant of the Litchfield. He remained in this ship until she paid off on 5 April 1744 and on 30 June was appointed to the Gosport. In this ship he went back to the West Indies, after the customary visit to the West Coast of Africa, but in August 1746 he successfully sought permission to return home on account of ill health as he suffered from violent pains in his bones. It was the following March before he reached England and in December 1747 he joined the Chesterfield.

And what of those on the side of law and order? O'Brien Dudley first entered the Royal Navy in August 1735 as a scholar at the Academy in Portsmouth Dockyard. In November 1737 he was sent to sea in the Phoenix but only remained in her for a few weeks before being transferred to the Hampton Court as a Volunteer per Order. In this ship he sailed to the West Indies. Having been promoted to midshipman after two years at sea he was, in February 1740, taken with him by one of the lieutenants, Edward Allen, who had been promoted to Master and Commander and given command of the Terrible, a bomb. In January 1741 he was taken into the Russell, flagship of Sir Chaloner Ogle, and he accompanied the Admiral when his flag was shifted to the Cumberland in June of the same year. On that sickly station of many deaths and quick promotion Vice-admiral Vernon gave him his first commission as 4th lieutenant of the Grafton on I November 1741 after barely four years at sea. When Sir Chaloner Ogle succeeded to the Command-in-Chief he transferred his protégée back to the Cumberland, in which ship he rose rapidly from 4th lieutenant to 1st, and on 1 March 1745 promoted him to be Master and Commander of the Basilisk, a bomb. In due course the Admiralty confirmed all these appointments and on 11 August 1746 made Dudley post into the Rose, transferring him on 23 November 1747 to the command of the Chesterfield. He was probably about 28 years of age in 1748. Though acquitted by the courtmartial the Admiralty can hardly have been satisfied with his conduct for he was never employed again. He died on 26 August 1759.

Roger Gastril, the boatswain, was about 35 years of age at the time of the mutiny. He joined the *Garland* as an able seaman in March 1734, serving afterwards in the *Lenox*, *Falkland*, *Ann Galley* (where he was first rated boatswain's mate) and *Marlborough*. The last ship he saw cut to pieces when her Captain Cornwall conducted himself with great gallantry that day under Mathews off Toulon in February 1744. On preferment he

transferred to the *Namur* and on 19 March 1747 we find him, being 'of good testimony', given a warrant as boatswain of the *Granado*, his predecessor having been 'turned before the mast' for some misdemeanour. From this ship he passed in quick succession to the *Glasgow* and *Chesterfield*.

The Admiralty realized the importance of his services in retaking the ship and told the Commander-in-Chief that, if he shared their high opinion, Gastril was to be sent to report to them when the courts-martial were over. Hawke sent Gastril to London on 11 July and two days later he was made a Master Attendant. In this post he spent six years at Woolwich, twenty-one at Portsmouth and seven at Deptford, at which last place he died on

5 March 1783, still in harness. His loyalty had served him well.

Sir Edward Hawke drew the attention of the Board to the part played by Thomas Gilliam, Master's mate, in supporting the boatswain. He had been at sea for eighteen years, 'some time of which was as Master of a merchant vessel, but being taken in her entered aboard the Chesterfield where he acted as Midshipman and Mate near four years'. This statement of Hawke's hardly agrees with Gilliam's Lieutenant's Passing Certificate which allows him nine years at sea of which about five and a half were in the merchant service before joining the Chesterfield on 15 November 1745. He appeared to be about 26 years of age. Hawke sent him to the Admiralty on 15 July and on the 19th he was given a Lieutenant's commission, then Navy Board being ordered to examine him. A week later he was appointed to the Wasp but he was not examined until 14 September, a rather unusual dispensation. After service in the Wasp, Anson and Sutherland he was discharged from the last ship to sick quarters at Halifax where he died on 21 March 1758.

David Frazier, the other Master's mate, sent a petition to the Admiralty which was passed to the Commander-in-Chief for his remarks. Hawker reported that Frazier 'was very instrumental in recovering the said Ship' and appeared to be 'an honest deserving man and worthy of their lordships notice'.

This Frazier was not a raw youth. We first find him joining the Flamborough from the Royal Escape in October 1741. Unfortunately the Musters Book of the latter ship for this period cannot be traced, so the backward trail ends here. He joined the Flamborough as quarter gunner and afters a few days was rated coxswain, so he can hardly have been a boy but must have had some sea experience already. After four years as coxswain of these Flamborough he joined the Chesterfield, still as coxswain and served sixed months in that rating, then a year as Midshipman, reverted to coxswain for five months and had been a Master's mate for a year at the time of the mutiny. His reward was to be examined and passed for gunner and, on

27 July 1749, to be warranted gunner of the *Peggy* sloop. This appointment only stood for a few days and he was then sent back to the *Chesterfield* to relieve his old companion, John Salmon, who was being transferred to the *Yarmouth*. He subsequently served in the *Guarland*, *Oxford*, *Deptford*, *Mars*, *Captain*, *Swiftsure* and *Hector*, being for about seven years in the *Mars* and *Captain*. The last appearance that I have been able to trace is as gunner of the *Hector* in July 1774.

The sad tale of Matthew Kitchen in tears might lead one to think of him as the youthful midshipmite once so popular in fiction. This picture is far from an accurate one. It is true that Kitchen had only been a midshipman for seven months but before that he had been for ten years able seaman and quarter master in the *Dragon* and *Chesterfield* and had been treated by

the surgeons for venereal disease in both ships.

Thus the extraordinary mutiny of the *Chesterfield* passed into history. Its initial success was only made possible by the loyalty and discipline of the British sailor. Couchman was at first followed, in spite of his strange behaviour, because his rank and position were respected. It is true that there was some hesitation, such as that of the sergeant, but initially this came to nought because, since the junior officers were as disciplined as the men, there was no one to lead any opposition. Once however, Gastril, supported by Gilliam, realized that it was up to him to retake the ship, the men willingly followed his lead and order was quickly restored.

FOUR JUNKS OF KIANGSI

By G. R. G. Worcester

HE name of the province, Kiangsi, west of the river, is somewhat misleading, as this region, whatever it may have been in the dim past, is now south of the river; and there is no mistake about it.

Although Kiangsi is mountainous as a whole and is seamed with deep valleys, it is rich in minerals and agricultural products. At its northern end lies a depression known as the P'oyang Lake, on the rich alluvial shores of which are the deltas of the various rivers flowing into it from the wide semicircular sweep of mountains walling in the province on the east, south and west. In the summer the P'oyang is some 90 miles in length and from 3 to 20 miles in breadth; but, during the low water season, from about November to March, it becomes a gigantic marsh (the home of countless wildfowl) and a mere network of intersecting shallow channels, which drain

into one or other of the rivers, towards a common outlet into the Yangtze at Huk'ow.

Of the rivers flowing into the P'oyang by far the most important is the Kan, which enters the lake on its south-western side, and next the Chang Kiang, which flows in from the east. Both these streams and the others smaller rivers have tributaries, with subsidiary creeks and canals. The number of smaller waterways in the north gives Kiukiang its name of Nine Streams. The Yangtze flows along the northern boundary of Kiangsii and is the main traffic artery not only of the province, but of China itself.

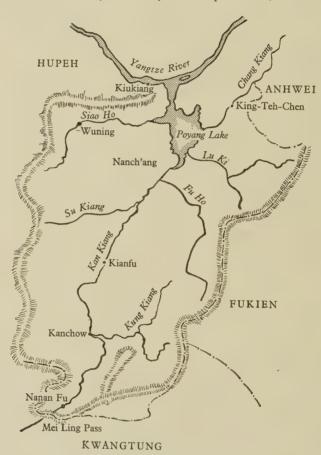


Fig. 1. Sketch map of the Province

As will be seen from the sketch map, the waterways of the province are most conveniently situated; indeed, so much so that the inhabitants rely very largely on their waterways for transport. Probably this is the reason why the officials have neglected the development of roads and land routes,

except in cases where they are absolutely necessary for communication with adjoining provinces.

Nevertheless, all these waterways have their navigational discomforts at some point and at some time or other of the year, be it floods, shoal water or rapids, when navigation becomes difficult and at times impracticable. As a result there is a number of types of junks designed to meet these disadvantages, each of which has some distinctive characteristic. The size and build of the junks themselves, and especially their draught, were always important, for the difficulties of the junkmen were not confined to those provided by nature. In this part of the country (and especially was this so in the days of Likin), this has long been the home of taxation, legal and illegal. The barriers for taxation were very numerous where trade was large, and where the local collectors had great powers, especially in fixing the amount of the levy. This varied from one-tenth of 1 % of their assessment of the value of the cargo, in some places, to 5 % in others, while it could be as high as 20 % if the officials were particularly rapacious. This pernicious 'squeeze' played such a part in the economy of the junkmen that their craft would take roundabout routes and make incredible detours, sometimes by tortuous and shallow creeks, to avoid as far as possible the unwelcome attentions of these mercenary officials or the military commands, who levied imposts to pay their troops.

The Kiangsi sail is the classic balance lug, for it has a considerable length of boom and area of sail forward of the mast. It is fairly high-peaked. One very noticeable feature of the Kiangsi junks is the great care the junkmen devote to their sails. Most of the junks, the larger ones especially, carry two suits of sails, the large, light fair weather sail and the smaller, strong bad weather variety. Both are often bent; the sail not in use is carefully stowed, wrapped round with mats and securely lashed. Another noteworthy characteristic is that all the junks of this area have balanced rudders

of a disproportionately vast size.

The junks that ply on these waterways vary greatly in size and type, their variety depending on the depth of water available and the nature of the stream to be navigated. Leaving out of account the very small boats which ply in the uppermost reaches of the rivers and their tributaries, the eighteen principal types may be divided into the three classes shown in the appendix.¹

Each of these classes has some distinctive note or notes singling it out from the others. Among such characteristics may be cited the number and

I When I was stationed in Kiukiang, I made plans of all these craft. Unhappily these, with the exception of those for the Fu Ch'uan and Ch'a Ch'uan, were destroyed during the Japanese invasion. The rough sketches illustrating this article have been taken from my field books.

placing of the masts, the shape of bow and stern, the build of the deckthouses, the arrangement of the hatches and the general lines of the hull. It is difficult to select the four types most worthy of remark from this list,, but undoubtedly those that follow represent some notable examples off Kiangsi craft.



Fig. 2. Fu Tiao Tzŭ

(1) THE FU TIAO TZŬ

The Fu Tiao Tzŭ is known on the P'oyang as the 'Hung Hsien Tzŭ', meaning 'The Red Slipper' and is perhaps one of the best known types; also, for a reason which will appear later, it is by far the most numerous. It is often large and, like most of the other Kiangsi junks, crudely built. It is exceedingly broad in the beam, but tapers sharply in the bow and to as lesser degree in the stern. The junkmen explain this by relating that, many decades ago, the shipwrights of the P'oyang Lake memorialized the Emperor, asking him to provide them with a design for a new type of junk. The Empress was present at the time and, being anxious to end the interview, kicked off her slipper and said, laconically, 'build one like that'. But this is legend.

The real reason is that from time immemorial it has been the established rule for the Kiukiang Customs, when ascertaining a junk's capacity, to allow depth and breadth to be measured 'at the tallest mast'. It is very noticeable that the foremast of these junks is by far the most lofty and that it is stepped in the narrow bow, where the depth is exceedingly small. These characteristics give them, especially when under sail, a very curious appearance; nevertheless, by this very simple expedient this type of junk manages to secure very preferential treatment from the Customs. The most

curious thing about this is that the rule has never, in my time at least, been altered, and it is even more surprising that the idea had not been adopted in other types. Perhaps the reason is to be found in the Chinese dislike of any change, be it good or bad.



Fig. 3. Ch'a Ch'uan

(2) THE CH'A CH'UAN

For centuries the province of Kiangsi has been famous for tea and has held the leading place among the tea-producing districts of China; so it is not, perhaps, surprising that there is a type of junk to which the name of Ch'a Ch'uan, or 'Tea Boat', is specially applied. Probably the finest tea in the world comes from the famous valley of Wuning, west of the P'oyang Lake, and in the past these boats were used exclusively on the Siao Ho in the transport of the famous Keemun Tea destined for central China. From this area, too, came the less well known and far less respected Brick Tea, so called because of its resemblance in appearance—and probably taste—to that useful adjunct to the building trade. Essentially it consisted of tea made from swept-up tea dust and scraps of leaves from the godown floors, steamed and pressed into hard inscribed bricks. It was processed in enormous quantities at Kiukiang for the Russian market. These hard cakes, it is said, were sometimes passed as currency in some districts of Russia. With the coming of the Russian Revolution, however, the trade came to a sudden end. Another and coarser variety, manufactured at one time at Kiukiang, included tea stalks. It was greatly in demand in Mongolia, where it was stewed in pots with goats' fat.

In the latter part of the last century tea of all kinds was the only cargod carried by these boats; and, although there is still a considerable traffic by water, these junks have latterly been employed in the carriage of general cargo on the various P'oyang Lake tributaries. Owing to their very light draught they are ideal craft for shallow water.



Fig. 4 Kan Ch'uan

(3) THE KAN CH'UAN

Of the many rivers flowing into the P'oyang the Kan, as has already been said, is the most important. Its chief claim to fame is that in former days it was the main route between central and south China. Along it, in the days of the East India Company and, indeed, later in the Clipper era, the teas from the gardens of Kiangsi found their way from the transhipment port of Nanch'ang to the British and American ships anxiously waiting at the Whampoa anchorages, near Canton. It was over this same route that opium in exchange found its way into central China.

This river gives its name to a particular type of craft known as the Kan Ch'uan. These boats are built in considerable numbers at Kanchow Fu, but they can be seen occasionally as far afield as Nanch'ang. They vary in size from 30 to even 100 ft. in length, with a beam never exceeding 18 ft. They may easily be recognized by their broad flaring bows and conspicuous cat-heads for working anchors. This type of craft is designed primarily for work in the rapids which obstruct the river above Kian Fu. These are not

nearly as formidable as those of the Upper Yangtze, for the speed seldom exceeds 5 knots; nevertheless, the stream in this part of the river is made specially difficult in that it changes direction with great suddenness. These junks, which are shallow-draught and quite flat-bottomed, manage to get to Kanchow Fu and, at some times of the year, as far as Nananfu on the far south-western border of the province, where they discharge their cargo destined for the south. On the backs of thousands of coolies, the cargoes not only of tea, but of all the rich produce of Kiangsi, travel over the 1000 ft. high and 24 miles long Mei Ling Pass, which is the connecting link between the Kan River and a tributary of the Pei or North River, to Canton. This pass, which derives its name from the plum trees growing in the vicinity, has at least twelve centuries to its credit; for the road is said to have been first cut in A.D. 714, during the reign of the Emperor K'ai Yüan, although it is probably a good deal older than this. At intervals along the broad and well paved road, sheds were placed for the accommodation of the unceasing stream of cargo porters, said to have numbered 50,000. A coolie well laden could cover the 24 miles in 8 or 9 hours. Once over the pass, the cargo was reshipped, this time into Kwangtung craft, and resumed its journey.



Fig. 5. To Lung Fu.

(4) THE TO LUNG FU

For lake and river work the Kiangsi boat builders have succeeded in developing this powerful type suited to the draught and restrictions of the low-water season. It bears a strong family likeness to the Fu Tiao Tzŭ. The characteristic feature of this type which marks it out from its fellows is the curved and elevated stem and stern, which remind one of some of the craft of ancient Venice.

During the Ch'ing Dynasty, A.D. 1644–1911, the export of porcelaint to the West reached considerable proportions. Much of this was made specially for the foreign market and does not, perhaps, do full credit to the true Chinese design; nevertheless, the tea pots, ginger jars and dinner sets, still to be seen in so many English homes all came from Khing-tê-chên on the Chang Kiang, where for centuries past all the Imperial pottery was made. Most of the porcelain was carried from the mouth of the river to Kiukiang; in these junks. Here it was examined by the Porcelain Commissioner, who had his residence in the city until the revolution of 1911.

In my early days in Kiukiang the inland waters of Kiangsi were the absolute preserve of the junk; it is, therefore, sad for me to have to record that these crude, albeit lovely, craft have been to a large extent driven out by the more profitable towed lighter.

APPENDIX

Types of Kiangsi Junks

Table 1. Trading mainly to and from lake and river ports

		· · · · · · · · · · · · · · · · · · ·	-
Туре	Tonnage	Туре	Tonnage
Kan Ch'uan Fu Ch'uan Tiao Tzŭ Chi An	30-60 25-85 30-55 35-70	Ch'a Ch'uan Lo t'an Lin Chiang Pa t'ou Cargo	35-7° 3°-6° 35-7° 7-5°
	Exports er, grass-cloth,	Imports Foreign piece goods,	

Tea, paper, grass-cloth, beans, rice, melon seeds, indigo

Imports

Foreign piece goods, cotton yarn, raw cotton, ironware

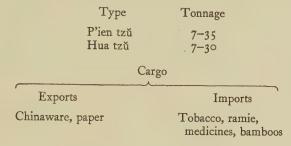
Table 2. Trading mainly from Lower Yangtze ports to Kiukiang and lake and inland river ports

		_		
Туре	Tonnage		Туре	Tonnage
Hsiao pa	75-325		Ch'uan	75-400
Shan ch'uan	45-105	Tung	g tzŭ k'o	45-105
Tsao ch'uan	70–105	Tao 1	pa	25-40
Hung ch'uan	25-70	Hsia	Chiang tzŭ	15-25
		Cargo		
(
Exports		I	mport	
Paper, timber, lime,			Salt	
bamboos, wood-oil, fire			out	
	ackers, persimmons,			
	, , , , , , , , , , , , , , , , , , ,			

varnish, samshu, alum

APPENDIX (cont.)

Table 3. Trading mainly from Upper Yangtze ports to Kiukiang and lake and inland river ports



THE KEPPEL-PALLISER AFFAIR, 1778-17791

By J. H. Broomfield

DO not remember that any thing has, in my time, excited so much indignation.' Thus wrote Edmund Burke on Christmas Eve 1778 of the dispute between Augustus Keppel and Sir Hugh Palliser. Britain was at war with its American colonies and with France; daily Spain was expected to join battle. Yet all interest was absorbed by the bitter charges and counter-charges levelled by the two admirals and their followers. From November 1778 to April 1779 the Keppel-Palliser affair dominated British politics and it divided the officers of the navy into two groups so hostile that years were needed to repair the breach.

What was the cause of this extraordinary affair? Was it an attempt by Lord North's Ministry to discredit the opposition admiral, Augustus Keppel? Or was it the work of a violent faction determined to embarrass the Government at no matter what cost to the nation? Both of these beliefs were current at the time and both have received the support of later historians. Neither explanation, however, is satisfactory in the light of the evidence which is now available.

I I am indebted to Professor N. C. Phillips of the University of Canterbury, New Zealand, for reading the script of this article, and for his valued advice.

² Burke to Philip Francis, 24 Dec. 1778, Correspondence of the Rt. Hon. Edmund Burke, 1744-1797 (ed. Earl Fitzwilliam and Sir Richard Bourke, London, 1844), Vol. 11, p. 251.

The affair had its roots in the very structure of the eighteenth-century British Navy. The quickest way to the top in that service was through a seat in Parliament; hence the large number of officers always found there. In the 1774-80 Parliament there were no fewer than 30. Inevitably, politics and naval business were closely linked, and Parliament was a forum in which disgruntled officers were accustomed to express their grievances. Generally these were concerned with personalities and appointments—with questions of 'ins and outs'—but the colonial revolution, raising as it did great issues, brought a new bitterness to the disputes and hardened divisions in the service.

From the first there was a small group of officers who were opposed to war with the Americans. Most were connected with the political opposition, especially the Rockingham party. With its long record of opposition to the Court and support for the Americans, this party provided a rallying point for those who grew disgusted with the war and it did everything in its power to encourage their hostility to Administration.

Among the naval officers it gained many recruits, for there was much discontent in the service. The Navy had been neglected after the Seven Years' War and the American Revolution revealed its weakness. Moreover, in the early years of that war, naval engagements were infrequent and there were relatively few casualties or captures of enemy ships to provide commands for junior men. The Administration was blamed, quite unreason—

ably, for the consequent lack of opportunity.1

This discontent focused upon the Earl of Sandwich and the small group of officers whom he chose to assist him with his work as First Lord of the Admiralty. These men were very able and they gave sterling service in administration and in defence of naval policy in the House of Commons. For their work, they were handsomely rewarded with rapid promotion and appointment to lucrative offices, and this won them the jealousy of their fellows.

Rear-admiral Sir Hugh Palliser, Sandwich's chief professional adviser, became particularly unpopular and when, in December 1775, the First Lord bestowed upon him the valuable sinecure of Lieutenant-general of Marines, there was a storm of protest.² Vice-admiral Augustus Keppel was particularly annoyed and exchanged a series of strongly worded letters with Sandwich. Palliser's appointment was an insult to the senior officers.

2 See The Private Papers of John, Earl of Sandwich, First Lord of the Admiralty, 1771-

1782 (ed. G. R. Barnes and J. H. Owen, London, 1932-38), Vol. 11, pp. 201, 202.

I An interesting example of this can be traced in the Rutland and Rodney papers. Sees H.M.C., Fourteenth Report, Appendix, Part I, The Manuscripts of His Grace the Duke of Rutland, K.G. (London, 1894), Vol. III, pp. 3, 4; and The Life and Correspondence of the later Admiral Lord Rodney (ed. Major-General Mundy, London, 1830), Vol. I, pp. 206, 207.

of the fleet, he said. 'What is to follow time will discover.' These were fateful words.

Keppel, a portly little bachelor of 50, was the Rockingham party's naval mascot. His early career had been distinguished, for he had been favoured by the happy combination of powerful influence and a war with France. By the age of 37 he had reached flag rank, but, after a term on the Admiralty board during the short-lived first Rockingham Administration of 1765–66, he had devoted his energies to political opposition.²

Rather surprisingly, he retained the respect of Lord Sandwich and King George III in spite of this and when, towards the end of 1776, growing French hostility suggested that a fleet might soon be needed in home waters, they readily agreed that the popular and distinguished Keppel be asked to take command.³ This he was willing to do but, because of the reinforcements required in America, the preparation of a Home Fleet was deferred. It was not until France entered the war in 1778 that he was called upon to take up his appointment⁴ and by that time the opposition naval officers had grown distrustful of the Admiralty. Keppel himself was making it clear that he was no admirer of the First Lord.⁵

From the first, his political friends had insisted that it was dangerous for him to serve under Sandwich and they had warned him to tread warily. 'I would determine not to trust Lord Sandwich for a piece of rope-yarn', his cousin, the Duke of Richmond, had written. 'Unfortunately, that was just how Keppel acted in 1778. When he was informed that he would shortly be required to take command, he told Sandwich that he could do so only upon conditions. 'Your Lordship will, I am sure, excuse my entering into this explanation when you consider the very delicate situation in which I stand, called upon to take upon me the defence of the kingdom at sea under an administration upon which I have not any claim for the indulgence of friendship.'7

This was not a good start to a tour of duty and, although these conditions were met, he maintained the same suspicious reserve towards the Administration during the three months that were required to prepare his fleet. He was particularly insistent that his instructions should be clearly expressed and it was only after many alterations that a suitable draft was agreed upon.

2 D.N.B.

I Keppel to Sandwich, 27 Dec. 1775, ibid. pp. 204, 205.

³ Sandwich to Keppel, 15 Nov. 1776, Sandwich, Vol. 11, p. 15.

⁴ Minute of Cabinet, 14 Mar. 1778, ibid. Vol. 1, p. 361. 5 See King to North, 12 Mar. 1778, The Correspondence of King George the Third with Lord

North, 1768-1783 (ed. W. B. Donne, London, 1867), No. 462, Vol. II, p. 147.
6 Richmond to Keppel, 19 Nov. 1776, Memoirs of the Marquis of Rockingham and his Contemporaries (ed. Earl of Albemarle, London, 1852), Vol. II, p. 361.

⁷ Keppel to Sandwich, 15 Mar. 1778, Sandwich, Vol. 11, p. 19.

On 12 June the British fleet sailed from Portsmouth to cover the French force at Brest. Keppel's ships immediately attracted the attention of the enemy and frigates were sent to watch his movements. Acting on his instructions, he captured two of the French vessels. Papers found aboard showed that the fleet at Brest was considerably larger than his own. His orders stated that he should return to St Helen's for reinforcements should he find himself greatly outnumbered and on 21 June he decided to do so. 41

That his decision was wise there can be little doubt, for his ships were all that stood in the way of a French invasion of the British Isles. Nevertheless, to the Administration the news of his return was most unwelcome. The Ministry was desperately anxious for some outstanding naval success to bolster its dwindling political support and here was the fleet back in port after only a fortnight at sea and without having even sighted the enemy, force. In their exasperation, many Government supporters made hasty, and ill-judged criticisms of Keppel. '... if ever I am concern'd in drawing instructions for Naval operations I will strike St Helens out of my Dictionary', growled Lord George Germain.2

The Administration's discomfort was increased by the uproar which thes news occasioned in the City. The West India fleet was expected daily and, with the English Channel now open to the French, the capture of these valuable merchantmen seemed all too likely.3 The Government was inundated with complaints from the influential moneyed interest on which itt

was so dependent in time of war.4

The general ill-feeling over the incident was deepened by the violence: of the public newspapers. These were a realitively new feature of English political life, but the unrestrained criticism and abuse which they heaped upon their opponents had already done much to embitter opinion during the American Revolution. With war now to be fought on England's doorstep and with 'a Gazette every morning at breakfast' (just as Horaces Walpole had once wished),5 the effect of this irresponsible journalism on the relations of the Administration and its naval officers was to be very serious.

The return of the fleet to St Helen's increased the distrust between

2 Germain to William Knox, 5 July 1778, H.M.C., Report on the Manuscripts in Various

Collections (Dublin, 1909), Vol. vi, p. 144.

I See orders dated 25 Apr. 1778, Sandwich, Vol. 11, p. 370; and Keppel to Sandwich, 21 June 1778, ibid. p. 98.

³ James Hare to George Selwyn, 29 June 1778, George Selwyn and his Contemporaries (ed. J. H. Jesse, London, 1882), Vol. III, pp. 292, 293.

⁴ For example, see Anonymous to Sandwich [June 1778], Sandwich, Vol. 11, pp. 101, 102. 5 Walpole to Countess of Upper Ossory, 8 Oct. 1777, The Letters of Horace Walpole (ed. P. Toynbee, London, 1903-5), No. 1807, Vol. x, p. 134.

Keppel and Sandwich. To the former it appeared that all his worst fears about discretionary orders were confirmed by the criticism of his action, and the latter began to doubt the wisdom of having appointed an opposition admiral to so important a position. Was it not perhaps true that Keppel had taken this step to embarrass the Admiralty? Certainly his political friends were trying to make party capital out of the business. Palliser attempted to smooth matters over between the two men, assuring each of the other's goodwill, but relations remained strained. I

On 9 July the fleet sailed again for its station off Ushant. The French, led by the Comte d'Orvilliers, were already out from Brest and on the 23rd Keppel sighted them. He immediately formed his line of battle but d'Orvilliers was not keen to fight and the wind enabled him to avoid a clash for four days. At last, on the morning of the 27th, it shifted slightly and the British closed with their adversaries. The engagement was brief for the two fleets met on opposite tacks, but even so both suffered much damage. Immediately firing ceased, Keppel attempted to re-form his force for another attack, but the rear squadron, commanded by Palliser, had been severely hit and it was not until late in the afternoon that he could obey the signal flying at the Victory's masthead. The British line was completed again shortly before dusk but it was then too late to attack. When morning broke the French had gone.2

The disappointment which the news of this indecisive engagement created in England was great. At Plymouth the returning fleet was met with a hostile demonstration from the seafaring populace,3 but on the whole it was agreed that the navy had done all it could. Compliments showered upon Keppel from his political friends; yet most realized that the national situation was little improved.

All energies were now employed in refitting the fleet for sea, for it was essential that the Channel be left unguarded for as short a time as possible. The damage suffered by the British ships was found to have been much greater than was at first supposed4 and, at Plymouth, Keppel and his two vice-admirals worked around the clock in an effort to hurry on the repairs. Keppel and Palliser were both ill at this time—the former with severe rheumatism and the latter with a chronically infected foot5—and, with the

¹ Palliser to Sandwich, 6 July 1778, Sandwich, Vol. 11, p. 110.

² Keppel to Sandwich, 29 July 1778, ibid. p. 128, and Palliser to Sandwich [31 July 1778], ibid. pp. 131, 132.

³ Lord Robert Manners to Marquis of Granby [9 Aug. 1778], H.M.C., Rutland, p. 13.

⁴ Sandwich to King, 9 Aug. 1778, The Correspondence of King George the Third, 1760–1783 (ed. J. Fortescue, London, 1927–8), No. 2403, Vol. IV, p. 185.
5 Keppel to Sandwich, 5 Aug. 1778, Sandwich, Vol. II, p. 137, and Palliser to Sandwich,

²⁶ Oct. 1778, ibid. pp. 184, 185.

anxiety and overwork, it is not surprising that they quarrelled. What caused the disagreement is not clear but it was apparently short-lived and, by the time the fleet sailed on 23 August, the two men were again on good terms.

Keppel now set out in search of d'Orvilliers, who was reported to have left Brest a week earlier. 'If I see the French fleet and we don't fight close, it will be their fault and not mine', he wrote.² He was doomed to disappointment. His adversary stayed out for a month but kept well to the south, apparently being interested only in protecting trade. Keppel searched in vain and, as September slipped away, he grew despondent. By October his ships and men were in poor condition and, with the approach of winter, it became increasingly difficult to remain at sea. Reluctantly he turned for home.

Writing to Sandwich as the fleet worked in to Spithead on 26 October. Palliser told of the low spirits of the British commanders. Keppel and he had suffered greatly from their disorders, he said, and both were mortified by the failure of the voyage.³ Disappointed, tired and ill, he went ashore at Portsmouth next day and was immediately shown a paragraph from an opposition newspaper (the *General Advertiser and Morning Intelligencer* of 15 October) which blamed him for Keppel's failure to renew the attack on the French fleet at Ushant.⁴

At this he was furious. 'After such a publication I think the nation has a right to know, and I am determined it shall be rightly informed, whether I or anyone else are blameable for what passed that day', he told Sandwich. 'I have ever resolved to disregard anonymous papers, yet the quarter from whence this reflection evidently comes makes it exceeding alarming. I have only one favour to hope for, that is that I may not be out of the way when the Parliament meets.'5

He left immediately for London and, when Keppel arrived three days later, demanded that he publish a denial of the newspaper accusations. This Keppel declined to do. Palliser therefore wrote a lengthy explanation of his own, which he published on 5 and 6 November.

2 Keppel to Sandwich, 23 Aug. 1778, Sandwich, Vol. 11, p. 156.

3 Palliser to Sandwich, 26 Oct. 1778, ibid. p. 206.

4 Sandwich, Vol. 11, p. 192.

5 Palliser to Sandwich, 28 Oct. 1778, ibid. pp. 184, 185.

I Captain Samuel Hood to George Jackson, 4 Aug. 1778, and Richmond to Keppel, [18] Aug. 1778, quoted, W. M. James: *The British Navy in Adversity* (London, 1926), p. 138; and Walpole to Sir Horace Mann, 25 Aug. 1778, *Letters*, No. 1886, Vol. x, p. 304.

⁶ Palliser to Keppel, 3 Nov. 1778, Annual Register (London, 1779), pp. 293, 294.

⁷ Sandwich, Vol. 11, p. 207, n. 1.

His action, although rather foolish, is not hard to explain. His position under Keppel was extremely difficult, for although only third in command at sea he was the senior professional member of the Admiralty and (as everyone knew) Sandwich's right-hand man. Moreover, he had often clashed with Keppel in Parliament and was well aware that the commander-in-chief disapproved of the favours he had received from Sandwich.

Unlike Keppel, he had had to fight hard for recognition in the service, for he had enjoyed no initial influence and it was only by outstanding ability that he had attracted Sandwich's attention. Although 2 years older than Keppel, he got his flag thirteen years later. From 1770 he had devoted himself to naval administration (first as Comptroller of the Navy and then from 1775 as a lord of the Admiralty)¹ and he must have resented the illinformed and unmerited criticism which was continually levelled at him by the aristocratic Keppel and his fellow politicians.

The publication of his letter started a great controversy, opinions differing sharply as to the wisdom of his action. Some thought it improper for an officer to defend himself in the public press,² while others (including the King)³ maintained that Palliser had been forced to do so. 'Everybody laments it', Robert Walsingham told Sandwich, 'and I can assure you no one more than Mr Keppel did, or strove to suppress it... I hope in God it will drop.'4

There was little likelihood of that, for Parliament was due to meet on 26 November and (in Walpole's words) 'prodigious bickerings were expected between the generals, admirals, commissioners, and ministers'. Expectations were fully met. There were demands in both Houses for an enquiry and, on 2 December, Keppel and Palliser clashed in the Commons.

Keppel told the members of his surprise at the appearance of the newspaper statement, for he had many times been attacked in the press, he said, and had never appealed to the public. Until the matter was properly explained, he could not sail again with Palliser. 'The oldest and most experienced officers in his Majesty's navy, in every engagement, saw something which they were before unacquainted with', he continued, 'and that day presented something new. He impeached no man of a neglect of duty, because he was satisfied that the officer alluded to had manifested no want of what was most essential in a British seaman—courage.'

I D.N.B.

² For example see G. W. Kempson to [Lord Lewisham], 4 [sic] Nov. 1778, H.M.C., Fifteenth Report, Appendix, Part I, *The Manuscripts of the Earl of Dartmouth* (London, 1896), Vol. III, p. 245. (The dating must be incorrect as Palliser's letter was not published until the 5th.)

³ King to Sandwich, 5 Nov. 1778, Sandwich, Vol. 11, pp. 207, 208. 4 Walsingham to Sandwich, 11 Nov. 1778, ibid. pp. 209, 210.

⁵ Walpole to Mann, 27 Nov. 1778, Letters, No. 1908, Vol. x, p. 348.

This hint of criticism brought Palliser to his feet. Angrily he demanded: 'If there was any real ground of accusation, why not make it fairly and openly?' Keppel, he said, 'seemed to speak with a kind of reserve, as if there was something behind; he heartily wished him to speak out....With

regard to the report of not obeying signals, it was a false report.'

Keppel's reply was like a spark in a gunpowder barrel: 'The vice admiral had alluded to signals, and said that it was no fault of his, that the fleet of France was not re-attacked. As to that, he could only say, that he presumed every inferior officer was to obey the signals of his commander; and now, when called upon to speak out, he would inform the House and the public, that the signal for coming into the *Victory*'s wake, was flying from three o'clock in the afternoon till eight in the evening unobeyed.' He did not charge the admiral with actual disobedience for he trusted that he would be able to justify himself were an enquiry held.

Palliser's reaction was extreme. On 9 December he placed before the Admiralty a demand for a court martial on Keppel, charging him with misconduct and neglect of duty at Ushant.² It was an extraordinarily foolish step to take. If he wished to clear his own reputation, he should obviously have asked for a court martial on himself. As it was, any failure to substantiate his charges must inevitably mean his ruin. It was the hasty action of an angry man and one which he must surely have regretted in calment

moments.

Palliser's demand put Sandwich in an impossible position. However, he acted he must incur the wrath of Keppel's supporters. If he attempted to suppress the matter and have the charge withdrawn, he would be accused of sheltering his minion, Palliser. If, on the other hand, he proceeded according to regulation and ordered a court martial, then he would appear to have associated himself with the attack on Keppel. He chose the latter course. Keppel was immediately sent a copy of Palliser's charge and ordered to prepare himself for trial.³

This turn of events caused general amazement in London and consternation in the fleet. 'The disgust of the major and better part of the marine is not easily expressed', remarked Burke.⁴ This was indeed the most serious result of the dispute. All the latent discontent in the navy now burst forth and the service was split into two factions, for and against Palliser. At the height of a desperate struggle with France and America, the nation's armed

2 Palliser to Sandwich, 9 Dec. 1778, Sandwich, Vol. 11, p. 193.

I The Parliamentary Register of the Fourteenth Parliament of Great Britain (ed. J. Almon, London, 1775-80), Vol. XI, pp. 90-94.

³ Philip Stephens to Keppel, 9 Dec. 1778, Annual Register (1779), p. 286. 4 Burke to Francis, 24 Dec. 1778, Correspondence, Vol. 11, p. 251.

forces were paralysed by a political feud unparalleled in British history. England was reaping the harvest of dissension sown by the revolt of her colonies.

In the House of Commons the opposition immediately accused Administration of a scheme to ruin Keppel, to which the Admiralty spokesmen replied that their board had no discretionary power when charges were preferred against an officer. It must order a court martial immediately. This was vigorously denied by the opposition and precedents were bandied back and forth across the House.¹

Writing to North next day, the King regretted that 'the strange-managed dispute between the two Admirals' had been raised in Parliament, and he recommended that Sandwich be replaced at the Admiralty. 'Administration will somehow or other be too much mixed in this affair, unless a change is made in that department', he said.² It was true that Sandwich could not avoid suspicion of collusion with Palliser, however much he might deny it. It was hard to see what he could hope to gain from such an attack on Keppel and yet, to opposition minds, it seemed incredible that Palliser would have acted without consulting his patron. In the fleet anchored at Portsmouth the dispute raged with all the bitterness of a vendetta and the Capulets (as Keppel's supporters were called)³ drew no distinction between Palliser and Sandwich, for they were convinced that the First Lord must be behind the affair.⁴

The court martial began at Portsmouth on 7 January 1779 and its story reads like a Gilbert and Sullivan comic opera. A special Act of Parliament had been passed for the court to sit on shore because of Keppel's ill-health,⁵ and, taking advantage of this extraordinary proceeding, all the leading members of the Rockingham party and many of their wives travelled down to Portsmouth to support their naval hero. 'The Dukes of Cumberland, Richmond, and Bolton are here', wrote the Judge Advocate, George Jackson; 'the Marquesses of Rockingham and Granby; Lord Effingham; Lieut.-Gen. Keppel and Mr Burke; I do not know if Dunning is; I could see Mr Lee.'6

At Westminster, parliamentary business came to a standstill. Everything, wrote Walpole, respectfully awaits the determination of the court martial; 'even France and America seem to lie upon their oars till the oracle at

¹ Parliamentary Register, Vol. x1, pp. 138, 143.

² King to North, 12 Dec. 1778, Donne, No. 528, Vol. 11, p. 218.

³ Sandwich, Vol. III, p. 32, n. I.

⁴ See memorial presented to the King by twelve admirals, 30 Dec. 1778. Gentleman's Magazine (London, 1779), pp. 13, 14.

⁵ Parliamentary Register, Vol. x1, pp. 180, 181.

⁶ Jackson to Sandwich, 7 Jan. 1779, Fortescue, No. 2497, Vol. IV, p. 255.

Portsmouth has pronounced'. The Earl of Shelburne, exasperated assusual at the behaviour of the Rockinghamites, suggested that he should!

bring in a bill to hold Parliament on board ship.2

Meanwhile Rockingham and his followers were having the time of their-lives. Each day, along with the townspeople of Portsmouth, they packed the court, to clap and cheer everything said in Keppel's favour and to hissi Palliser and the prosecutor. 'Popularity is without a negative', wroted Jackson.' That their presence influenced the proceedings there can be little doubt, the prosecution witnesses in particular finding it no joke to be hissed by a court full of dukes, marquises and earls.

It was soon clear that things were going well for Keppel and that hiss trial was winning him much wider fame than his naval exploits had ever done. He 'is grown at least one foot in stature and very little less eloquents than Mr Burke', Lord John Cavendish had declared. '...so many pleasing circumstances attend this attack upon him it is very far from being a matter to be lamented.4' To Palliser it became increasingly clear that his charges would fail and that Keppel would be acquitted with honour. He sent despondent letters to Sandwich, lamenting the course of events, and by the beginning of February he was so unpopular that he said her feared for his life when the verdict should be announced.5

His fears were shown to have been fully justified. On the morning of IT February the charges against Keppel were declared by the court to be 'malicious and ill-founded' and he was unanimously and honourably acquitted. Immediately a procession was formed around him and he was marched through the streets of Portsmouth, his supporters wearing light blue ribbons with his name in gold letters, and headed by a band playing 'See the Conquering Hero Comes'. 'The whole concourse and ladies from the windows supplied the vocal part, and the crowd closed each period of the harmony with a choral cheer....It is impossible to paint the joy that possessed every face. Holiday was expressed in every look, and the hearts of the people were in their eyes.'7

The news of the acquittal reached London that evening and the Rocking-

I Walpole to Mann, 29 Jan. 1779, Letters, No. 1919, Vol. x, p. 366.

2 Duke of Manchester to Rockingham [Feb. 1779], Rockingham, Vol. 11, p. 369.

3 Jackson to Stephens, 8 Jan. 1779, Fortescue, No. 2498, Vol. IV, p. 255.

4 Lady Charlotte Wentworth to Rockingham, 20 Dec. 1778, Wentworth Woodhouse Muniments (Sheffield, Central Library), Rockingham MSS, RI-1003.

5 [Palliser to Sandwich, 24 Jan. 1779], Sandwich, Vol. 11, p. 219; and same to same, 5 Feb.

1779, ibid. p. 222.

6 Sentence of the court martial, Fortescue, No. 2532, Vol. IV, pp. 273, 274.

7 An Authentic and Impartial Copy of the Trial. Quoted, Sandwich, Vol. 11, p. 195.

hamites were ready with a general illumination. Unfortunately, it was a very warm night and the mob was out in the streets. It descended on the Admiralty to tear off the gates and from there it toured the city, breaking the windows of Ministers and Admiralty lords. Palliser's house in Pall Mall was looted and his furniture burnt in St James's Square. Germain had all his doors and windows battered in, and Number 10 Downing Street was saved only by the intervention of the Guards and the reading of the Riot Act.²

On the following day, Colonel Isaac Barré carried a motion in the House of Commons thanking Keppel for defending the kingdom and Rockingham moved a similar resolution in the Lords on 16 February.³ Four days later the citizens of London presented Keppel with the Freedom of the City in a box of heart of oak.⁴ As Sandwich had predicted, the stream ran very strongly against Palliser.

Indeed, he was so unpopular that the Administration could afford to retain him no longer. Already Sandwich had persuaded him to ask for a court martial on himself, and on 12 February he resigned his seat at the Admiralty and withdrew from Parliament.⁵ At Portsmouth a memorial was being circulated among the captains requesting the removal of Palliser from all his offices.⁶ Despite Sandwich's opposition, it was decided that he must be persuaded to resign.⁷ This was done and on 18 February the Admiralty received his resignation.⁸

His court martial attracted remarkably little attention, for by that time the 'Parliament Pack' was in full cry after Sandwich. Keppel, when approached, wisely declined to prefer charges against him and the Judge Advocate had to act again as prosecutor, selecting matters of accusation from the minutes of the earlier trial. The court sat from 12 April to 5 May and acquitted Palliser of misconduct at Ushant, declaring his conduct to have been 'in many respects highly exemplary and meritorious'. It made

I Duchess of Portland to the Duke, 9 Feb. 1779, quoted, A. S. Turberville: A History of Welbeck Abbey and Its Owners (London, 1939), Vol. II, p. 142, n. 2.

² Walpole to Mann, 12 Feb. 1779, Letters, No. 1924, Vol. x, pp. 378, 379; Sir Joshua Reynolds to Keppel, 12 Feb. 1779, Donne, Vol. 11, pp. 227, 228; and Annual Register, 1779, pp. 198, 199.

³ Parliamentary Register, Vol. XI, p. 235, and Vol. XIV, p. 125.

⁴ Annual Register, 1779, pp. 296, 297.

⁵ Palliser to Sandwich, 5 Feb. 1779, Sandwich, Vol. 11, p. 222; and Donne, Vol. 11, p. 230.

⁶ Captain Samuel Hood to Sandwich, 10 Feb. 1779, Sandwich, Vol. 11, p. 228.

⁷ North to King, 13 Feb. 1779, Fortescue, No. 2542, Vol. IV, p. 278; and same to same [17 Feb. 1779], *ibid*. No. 2547, Vol. IV, pp. 281, 282.

⁸ Palliser to Sandwich, 18 Feb. 1779, Sandwich, Vol. 11, pp. 232, 233.

⁹ Keppel to Stephens, 18 Feb. 1779, Parliamentary Register, Vol. XI, p. 240; Robinson to Sandwich, 15 Feb. 1779, Sandwich, Vol. II, p. 231.

one reservation only: that he should have informed Keppel of the disabled

state of his ship.1

This decision was calmly received by the opposition politicians, for most of them felt that Palliser had already been punished sufficiently for his foolishness.² Certainly he had suffered a great deal. He had lost his employments and his parliamentary seat, and he had been ostracized from society. Never wealthy, he was now reduced almost to penury. Not only did he lose an income of £3000 a year but he had also spent £3000 in his defence.³ He never again saw active service and, for his remaining 18 years, languished on the half-pay list. It was a tragic end to the career of an officer so able and loyal.

For Keppel, too, the dispute meant the end of service at sea, but this was largely of his own doing. On 25 February the King received a paper entitled Thoughts of Admiral Keppels Concerning his Situation in which Keppel complained of the ill-treatment he had received from the Admiralty and hinted that there should be a change of Ministers. Obviously he was trying to force a showdown, but the Administration could not risk the further unpopularity of dismissing him. An attempt was made, therefore, to get him to resign his command, but he was guarded in his reply. He did say, however, that it was 'next to impossible' for him to serve again under the present Admiralty and it was decided to treat this as a resignation. A letter was sent expressing 'surprise and concern' that he should find its necessary to resign but ordering him to strike his flag.

Commenting on Keppel's position, Charles Jenkinson had remarked ruefully: 'The Opposition are very full of Spirits & Presumption'.7 They were indeed. Keppel's trial and the popular rejoicing which had accompanied his acquittal had obviously embarrassed the Administration. The Rockinghamites were certain that they had North and his fellow Ministers:

on the hip, and they drove home their advantage in Parliament.

In the long run, however, the affair did them little good. Certainly its gained them some recruits from among the naval officers, but at the same time it may well have weakened their influence with the independents. The country gentlemen, arbiters of the fate of any eighteenth-century Administration, disliked the participation of army and navy officers in politics and, at a time when the nation was threatened from abroad, they

I Sandwich, Vol. 11, p. 197.

2 Hare to Selwyn, 18 May [1779], Jesse, Vol. IV, p. 140.

3 Sandwich, Vol. 11, p. 197.

4 Fortescue, No. 2560, Vol. IV, pp. 289-91.

5 Keppel to Stephens, 15 Mar. 1779, Sandwich, Vol. 11, p. 195.

6 Stephens to Keppel, 18 Mar. 1779, ibid. p. 196.

7 Jenkinson to King, 5 Mar. [1779], Fortescue, No. 2570, Vol. IV, p. 298.

were particularly suspicious of any who encouraged it. It is possible, therefore, that the Rockingham party did itself more harm than good by its part in the affair.

The dispute left the Home Fleet in poor shape. Desertion and indiscipline among crew-members had increased seriously while admirals and captains were engaged with the courts martial, and the officers were deeply divided amongst themselves. Many of Keppel's supporters, and even some moderates who had taken no part in the affair, resigned their commands, declaring that they could not serve under an Admiralty which had permitted such groundless charges to be advanced against one of its officers.

Each of the parties in the navy now openly associated itself with a political group and it regarded the other as willing to go to any lengths for its own advantage. From this time there was a marked reluctance among naval officers (as among politicians) to believe that men of opposite opinions were acting in good faith. Admiral George Rodney, returning after five years abroad to take command in 1780, was horrified by what he found. 'The unhappy difference between Mr Keppel and Sir H. Palliser has almost ruined the Navy', he wrote. 'Discipline in a very great measure is lost...and officers presume to find fault and think, when their duty is implicit obedience. Faction and Party is so predominant.'

Who is to bear the blame for all this? Palliser, certainly, must take a large share. His accusations were quite unfounded and his demand for a court martial very rash. There are others, however, who must answer. Keppel, in refusing to deny the newspaper allegations and in provoking Palliser in the House of Commons, was surely culpable. Sandwich himself was not free from blame. His position was much too ambiguous for he made no great effort to dissociate himself from Palliser's attack. The Rockingham party, too, did much harm by encouraging naval discontent and by making such a burlesque of Keppel's trial. Yet in the final analysis, we should perhaps agree with Lady Pembroke that there were 'so many wheels within wheels, & misfortunes besides faults, that one shou'd not judge too hastily in these kind of public things'.²

1 Rodney to Sandwich, 16 Feb. 1780, Sandwich, Vol. III, pp. 201, 202.

² Lady Pembroke to her son, 7 Aug. [1779], The Pembroke Papers, 1734-1780 (ed. Lord Herbert, London, 1942), p. 215.

THE ORIGIN AND DISTRIBUTION OF THE DUG-OUT CANOE IN AUSTRALIA

By C. Halls

HE watercraft of the Australian aborigines has long been overlooked by scholars, yet the coastal aborigine of the north-west and Arnhern Land has shown himself to be a good sailor within the limitations of his somewhat retarded technical knowledge and ability.

Log floats, primitive rafts and bark canoes were the only craft known to the aborigines until the Malays began to visit Australia probably about five hundred years ago. These Malays generally sailed from Macassar in the Celebes and hence they are known as Macassans in Australian history.

The dug-out canoe, the mast and the pandanus sail are the most important maritime legacies of the Macassans to the aborigines of the northwest of Australia. But although there are frequent references in aboriginall mythology and folklore concerning Macassan praus,³ it appears that the dug-out canoe does not warrant a mention; yet this vessel, introduced by the Macassans, has become thoroughly integrated in the traditional aboriginal culture. Dug-out canoes are often used by the aborigines with a mast and sail, and they use the same terminology for the equipment of a dug-out ass was formerly in use for the corresponding equipment aboard a prau. Wash strakes are also known to the aborigines and not a few dug-outs are fitted with them.

Note on aboriginal nautical terminology

Little work has been done in the field of linguistics among the aborigines,, and so far the writer has only been able to obtain the following terms as applying to different types of watercraft. The general terms for ropes,,

I C. P. Mountford (1956), 'Art, Myth and Symbolism', Records of the American-Australian: Scientific Expedition to Arnhem Land, Vol. 1, p. 100. W. E. Roth (1910), 'Transport and Trade', Bulletin, North Queensland Ethnography Records of the Australian Museum Sydney, no. 14.

2 Authorities differ in assigning an approximate date to early Malayan connexions with the Australian continent. There does, however, appear to be general agreement that the earliest connexions date to a period between 300 and 500 years ago. But until this date is affirmed by archaeological or documentary evidence the problem must remain unsolved. A dating of 500 years ago from today is by no means extravagant, in the light of what is known of Malayan history and the seafaring prowess of the Macassans. Also this dating appears to be corroborated by Australian aboriginal mythology and folklore.

3 C. P. Mountford, 1956, 'Art, Myth and Symbolism'. Records of the American-Australian:

Scientific Expedition to Arnhem Land, Vol. 1, p. 100.

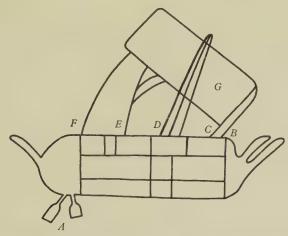


Fig. 1. An aboriginal artist's impression of a Malay prau. A, Paddles (miaitja); B, rope (bukuna); C, rope (panalunta); D, mast (palia); E, rope (pia pia); F, rope (lulu); G, sail (gumbala).

paddles, etc., will be seen in the accompanying drawing. Bark canoe, anantilupa; dug-out canoe, liva liva; Malay prau, Mitjuna.

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RECORDS

PHOTOGRAPHS OF DEAL BEACH AND BOATS

Major F. V. Longstaff of Victoria, British Columbia, is the owner of the original negatives from which the photographs of Deal luggers facing page 210 have been printed. As views of Deal beach in the days of sail are extremely rare, rather than let these unique photographs be forgotten Major Longstaff has offered them to the *Mariner's Mirror* to be reproduced at his expense, thus making a very generous gift to the Society.

Included with the prints there are also some interesting notes on the various types of Deal boats that were used before the advent of the internal combustion engine. Major Longstaff himself has been afloat under sail in one of the famous Deal galleys and there cannot be very many people who can say that now. There were three main types of beach boat at Deal, the lugger, the galley punt and the galley. The lugger was the largest of the three and was between 35 and

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40 ft. in length and 12-15 ft. in beam with full lines and a flat floor so that she could be beached easily. She had a 'cuddy' up for'd so that the crew could get some shelter, which was very necessary seeing that the luggers often went as far west as Falmouth in their search for a ship

wanting a pilot.

A further use for these luggers was the carriage of stores, anchors and cables, etc., to vessels anchored in the Downs. The galley punt was a smaller, lighter boat than the lugger being about 30 ft. in length, no more, and about 7 ft. beam. These were fast sailing vessels used for landing pilots and communicating with a ship in the Downs and the shore. The galley punt was a conpletely open boat and she had cod's head and mackerel tail lines; with a single square-headed dipping lugsail and the mast nearly amidships. The luggers had two masts, a dipping lug, very square, on the fore and a standing lugsail on the mizzen with a long horizontal out-rigger, not cocked up at all like the west of England luggers. Finally there was the galley which was really: a fast pulling boat useful in light weather; though meant more for use with oars, it also had a single mast with a square dipping lugsail. As they were pulling chiefly boats they carried five hands. Their dimensions were about 29 ft. in length and 5 ft. beam. In the winter they carried a shorter mast and a smaller lugsail. Major Longstaff has pointed out that there are very few books on Deal and its boats and as far as he knows only one by a real Deal boatman and that is The Log of a Deal Pilot by Mr William Stanton; this log was edited by the late Mr Ashton H. Long of 120 High Street, Portsmouth. He goes on to say: 'Mr Stanton's lugger was called the Ox and would be about 35 ft. in length and 12 ft. in beam, rigged with old fashioned squareheaded lugsails. Clinker built of English Elm and ballasted with bags of shingle from the beach; rudely and simply equipped, yet ready to face any winter's gale. The boats were built in the neighbourhood, and were the product of generations of practical experience. There were apparently no plans, but three moulds or sections were used and these moulds were handed down from father to son.' Major Longstaff writes that: 'I have seen many galleys and other boats hauled!' up the steep beach on skids, generally by one man using a small capstan with one long bar. For the boats in my time a large snatch block was always used with a large hook and it slid up the steeps shingle with a bight of the rope through it. The thin skids had to be used all the time both for launching and hauling up. After beaching the boat would be turned around so it would go up: stern first and be in a position for launching. The old man who worked the capstan would get about a shilling or sixpence a time. Another curiosity on Deal beach were iron anchors in ones piece, long shanks and thin stocks, but one fluke was made into a cross handle so that the anchor could be pressed down into the shingle and used as a drag.'

For those who would like further information on these boats Major Longstaff recommendss the following books: *Memorials of the Goodwin Sands and their Surroundings Legendary and Historical*, by George Byng Gattie (W. H. Allen and Co. 1890), *A Sea Painter's Log*, by Robertt C. Leslie (Chapman and Hall, 1886); *Waterbiography*, by the same author (Chapman and Hall,

1894).

H. OLIVER HILL

NOTES

ADMIRAL SIR BENJAMIN HALLOWELL CAREW

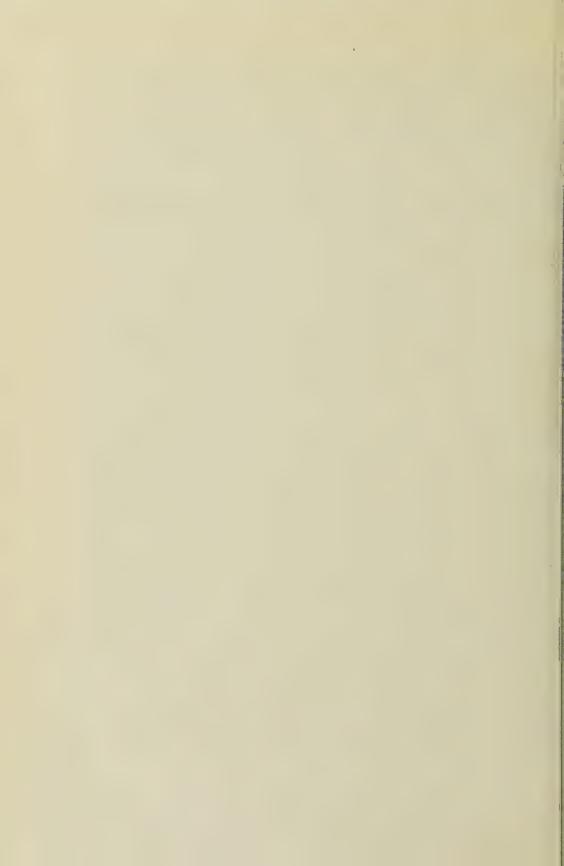
When one of Nelson's Nile captains, Benjamin Hallowell, who had later taken the name of Carew, died on 2 September 1834, an obituary notice appeared in the *United Service Journal*, 1834. Part 3, page 374, stating that the Admiral had been born in Canada. This statement, although it was erroneous, was copied by the *Dictionary of National Biography* and is repeated by many historians down to the present day.

The truth is that Hallowell was born on I January 1761 at Boston, Massachusetts, where the

entry can be found in the birth records at the City Hall.



Photographs of Deal Beach and Boats



It seems that the Hallowell family settled in Boston during the seventeenth century and there, in 1724 or 1725, was born to Benjamin Hallowell and his wife Rebecca, née Briggs, a son whom they christened Benjamin. This second Benjamin was a privateer captain in his young days, became Collector and later Comptroller of Customs at Boston and married Mary Boylston. It was this couple who were the parents of the future Admiral.

His leanings having been loyalist in the War of Independence, the second Benjamin moved to London in 1775, taking with him his mother Rebecca and daughter Mary. Rebecca died in 1795 and the next year Mary's husband, John Elmsley, having been appointed Chief Justice of Upper Canada, Benjamin crossed the Atlantic with his daughter and died in Canada in 1798 or

1799.

It seems probable that when the Admiral died the writer of his obituary knew that he had come from across the water and, finding that the father had died in Canada, jumped to the conclusion that the son had been born there. Hence the error.

When the second Benjamin returned to England his brother Robert remained in Boston and his son, another Robert, left notes on the family history which have survived. To this day there are descendants of Robert Hallowell in the United States and of the Elmsleys in Canada.

(Based on information received from a descendant of Robert Hallowell, the late Lieut.-Cmdr. Arthur Gardiner, U.S.N.R., of Tucson, Arizona.)

w. E. MAY

SAILING BARGES

Captain Bob Roberts's recent book is a reminder to us that the last days of sail, as far as trading is concerned, cannot be far off on the East Coast. It would be a pity if this were not recorded. Fortunately the *East Anglian Daily Times* records the arrival and sailing of shipping for the port of Ipswich, and from them the following note has been prepared.

At the beginning of 1959 there were seven sprit-sail barges trading to and from Ipswich, all built in the last decade of the nineteenth century and the first decade of the present century. The *Marjorie* and the *Anglia* were owned by R. and W. Paul Ltd., the *May*, the *Spinaway C* and the *Venture* owned by Cranfield Brothers Ltd., Everards's *Cambria* and the *Memory* owned by the

Sailing Barge Preservation Society.

The master of the *Marjorie* was 'Paddy' Fisher, a man in his early twenties, who had been master of the *May* at the age of 19. His mate was his brother-in-law, 'Paddy' Holmwood, a man also in his early twenties, from Whitton. This barge commonly carried 125 tons of cargo. In 1959 the *Marjorie* made twelve voyages between Ipswich and London, bringing in maize, barley, pollards ground nut, cattle cake and soya bean meal. There were two long spells of idleness at Ipswich (25 and 63 days) and two spells (51 and 39 days) in the London Docks. In 1960 the *Marjorie* made nine voyages to Ipswich with similar cargoes. In the middle of July she arrived in Ipswich from the Colne and in August arrived from London light and went out light. On 20 October she sailed for Burnham light (Lunley, master) and was sold.

The reasons for the disappearance of the *Marjorie* as a trading vessel illustrate the difficulties of barge owners today. In the first place there is the difficulty of obtaining crews as few young men are interested in sail today. Secondly, all but two of the passages of the *Marjorie* and the other barges to London were light. And then there was the uncertainty of the time that would be taken by the passage. Captain Fisher has sailed from Gravesend to the Orwell in nine or ten hours,

but in 1958 one round trip took thirty-five days.

R. and W. Paul's other barge, the *Anglia* (Ipswich-built like the *Marjorie*) made sixteen voyages, largely in the first half of the year between the Thames and the Orwell. The cargoes carried in this year and in 1960 included locust beans, sorghum seed maize, cattle cake, meal, barley, pollards and ground nut cake, in addition to one cargo of dari seed. The *Anglia*, Ling, master, sailed from Ipswich on 14 October 1960, having been sold, bound for Gravesend. In these two years the *Anglia* took two outward cargoes, one of maize and one of malt.

Cranfields' May (Irving and Jackson, masters) arrived at Ipswich early in August 1959 and since then has been used in the port for lightering and storage. She is still in good order, apart

2 I 2 NOTES

from a damaged leeboard, and has her sails and gear for use if need be, if cargoes were available. In the five trips in 1959 the May carried cargoes of wheat.

The Spinaway C, Fairbrother and Langford, masters, likewise has spent the last year and a half in the docks at Ipswich. In the first half of 1959 she came in twice from London with wheat,,

and once from Mistley light.

The Venture, Fowler, made eight voyages in 1959 and fourteen in 1960, largely bringing in wheat from London. But in 1959 she made two voyages to Stroud with flour, and in the early

part of the year brought in two cargoes of locust beans.

The Sailing Barge Preservation Society made an unsuccessful attempt to keep the *Memory* trading under sail. In the course of 1959 the *Memory* came into the port of Ipswich from the London docks, once with sorghum seed and once with maize. She came in twice from Mistley, light, and went out light. She was laid up in March 1960 and it is said that she may become a house-boat, having been taken from Ipswich to Halstow Creek (Kent) in February 1960.

Sir Clavering Fison says, 'The Memory was built for my father, James Fison, who also owned the barges Kimberley and Hasteaway. I well remember the Memory coming to tie up in the River Stour below Stutton Hall in 1904 when Captain Robert Haste took us all for a sail down the river. The Memory and the Kimberley and the Hasteaway were all commanded by members of the Haste family and when my father died we sold them to the Hastes. All these barges traded between Ipswich and London and were principally engaged in bringing back flour from the Eastern Union Mills on Stocke Bridge which belonged to my family.' Captain A. J. Pittock, who was master of the Memory from 1937 to 1951, added that Captain Haste sold her to Mr Christopherson and one of his partners (merchants in Ipswich) with Captain W. Randon holding 16 shares. In 1951 this barge was sold to Messrs M. F. Horlock. Between 1926 and 1940 the cargoes consisted mostly of cattle foods from London to Ipswich in addition to fertilizers in bags from Barking to Ipswich.

Captain Roberts, master of the Cambria and author of the book Last of the Sailormen, visited Ipswich once, bringing wheat from London, arriving on 23 March 1959 and sailing on the

following day.

At the present moment there are only two sailing barges afloat, the *Cambria* and the *Venture*. The owners of the *Cambria* may well keep her going for some years. Cranfields say that they hope to keep a barge trading under sail for as long as possible. 'It is largely a matter of sentiment', they add. 'It is not really an economic proposition to run a sailing barge today, but we should not like

to see them disappear altogether.'

The Anglia has carried a number of items of interest besides the factual arrivals and sailings. 'Paddy' Fisher was recorded as lamenting the fact there are now so few sailing barges that the steamers no longer give them the right of way, and expect the barges to keep clear of them. It was mentioned that 'Bob' Roberts skippered Everards's Dreadnought in 1959 and 1960 in the Thames sailing barge match. In 1960 the skipper of the Maid of Connaught, which finished fourth in the staysail class, was Captain Ling of the Anglia. The skipper of the Millie was Mike Lunley of Ipswich, who, at the age of 25, was the youngest skipper in the race. He had been in barges since the age of 1 and had been a master for six years.

The Essex Education Committee proposed to buy a sailing barge as a training ship for youth

A. G. E. JONES

organizations, but no choice has yet been made.

THE BADGE AND FLAG OF THE NATIONAL MARITIME MUSEUM, GREENWICH

The Seal and Badge of the Navy Office (1546–1832) comprised a conventional anchor (without cable) placed vertically with a similar but smaller anchor on each side of its shank.

By special permission of the Lords Commissioners of the Admiralty this emblem was adopted by the National Maritime Museum at the time of its inauguration in 1937. However, it was

not until 1956 that the Trustees decided to ask the Lords Commissioners for permission to use the Navy Board's flag—the three anchors, in gold, on a red field. This was granted on 28 July 1957 and the flag was flown for the first time on 8 January of the following year.

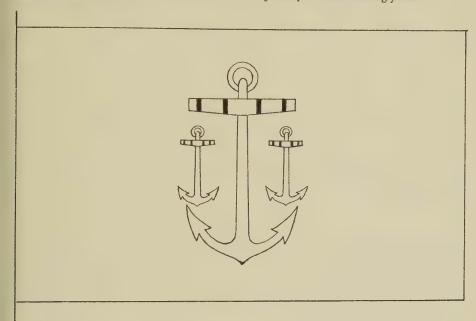


Fig. 1. Flag of the National Maritime Museum.

Perrin, in his *British Flags*, pages 126–7, tells us that Pepys (1633–1703) first suggested that public ships, other than men-of-war, should wear a distinctive flag—see his *Sub Notes about Flags and Colours*, drawn up c. 1687. However, the Revolution of 1688 caused this suggestion to be shelved until 1694 when a Royal Proclamation, dated 12 July of that year, was issued. This read as follows:

'Such Ships and Vessels as shall be employed for Their Majesties' Service by the Principal Officers and Commissioners of Their Majesties' Navy, the Principal Officers of T. M. Ordnance, the Commissioners for Victualling T. M. Navy, the Commissioners for T. M. Customs, and the Commissioners for Transportation for T. M. Services, relating particularly to those Offices shall wear a Red Jack with the Union Jack in a Canton at the upper corner thereof next the staff, as aforesaid, and in the other part of the said Jack shall be described the Seal used in the respective Offices aforesaid by which the said ships and vessels shall be employed.'

The General Post Office was added to this list in accordance with an Order in Council dated 19 November of the same year. The distinctive device or badge consisted of 'a man on horseback

blowing a Post Horne'.

From later papers in the same year it appears that this device should be placed in the fly of the

red jack, like the seals of other government departments.

The use of the red jack with the seal of office was confirmed in the Proclamations of 1702 and 1707 but King's Regulations of 1731 slightly varied this by providing that the seal might be displayed in the body of the jack or ensign; the Regulations of 1806 completed the transfer by directing that the seal should be depicted 'in the fly of the ensign', and the Regulations of 1844, not content with this, provided that the seal or badge should be placed 'in the centre of both Ensign and Jack'.

With the abolition of Squadronal Colours on 9 July 1864 these seals and badges were trans

ferred to the Blue Ensign and Jack.

A red ensign charged with the Navy Office badge is to be found in the Dutch Flag Book-Vlaggen van alle Natien, figure 88, Weytingh & Brave, Amsterdam, c. 1864, and an illustration of the Navy Board's flag is shown in A Display of the Naval Flags of All Nations, page 2, Henry Fisher, Son and P. Jackson, London, c. 1839.

H. GRESHAM CAR

ROYAL GEORGE OR ST GEORGE

There must be a mistake in Commander May's Note on p. 296 of the November issue, though it may perhaps be due to the original scribe. There was no Royal George until 1714, but there was a St George, the Charles of 1668 renamed in 1687. This must be the name intended.

R. C. ANDERSO

[Commander May writes: 'I am most grateful to Dr Anderson for pointing out what was in feet my error of typing. The name given in the reference which I quoted is the *St George* and I could the *Royal George*.]

A MEDIEVAL VICTORY

In an exchequer account of 1370 there has recently been found a reference to a ship named the Vyctorye. Medieval ship names were so stereotyped that this would be noteworthy apart from the associations of the name as a striking exception to the religious names which were more usual Everyone who has worked upon the records of this period knows how often such names at Trinity, Gracedieu, and Magdalen are to be found, together with ships named after such popular saints as Nicholas, Peter, and John, but a search of the Calendars of Close, Fine, and Patent Roll has not produced a single Victory.

The account is for money paid by one John de Clifton, who seems to have held some minor exchequer post,² to the masters and crews of ships which were to take John of Gaunt and an arm; to France. Damage to the document has destroyed the name of the *Vyctorye*'s home port, written the margin, but to judge from the others which remain it was almost certainly Dartmouth.

The entry is very brief, stating merely that £20. 35. has been paid to John Paul, master of ship named the *Vyctorye* of 120 tons, for the wages of a constable and thirty-two mariners. There are no details of the ship herself apart from the tonnage, and nothing is said of the troops whom she probably carried. The preceding entry in the account, a payment to Richard Fyssher of the Seintmaricogg, gives the period of service of these ships as the thirty-five days from 11 July 11 August, although some of this time was probably spent in port.

Unfortunately there is nothing to suggest that our Vyctorye was a king's ship. Presumably shi was a merchant vessel, impressed in the usual way when needed and sent about her peaceful business afterwards. The naval genealogist cannot claim her as an ancestor of Nelson's flagship.

but she is of interest to students of a neglected subject, the history of ships' names.

A. T. HAL

FALCONER'S DESCRIPTION OF A XEBEC

In the course of his note on polacres (M.M. 1960, p. 216), Mr Dennis claims that Falconer description of a xebec is so faulty that it makes what he says about polacres of little value. I will not risk taking sides in the controversy as to whether polacres had foot-ropes or not, but I muspoint out that Falconer's description of a xebec is amply confirmed, as far as concerns the huil

1 Public Record Office, E 101-30-29, m 4.

2 Calendar of Patent Rolls, 1367-70, p. 185. He appears elsewhere as a purveyor of corr for Calais, G.P.R. 1370-74, p. 99.

by one of Chapman's plans of almost exactly the same date. Chapman's 'Algedine chebek' shows the long beak, the projecting poop, the narrow floor with—comparatively—great width of top-ide, the great camber on the deck and the side-gangways. If one wished to describe this draught

n words, one could hardly improve on what Falconer wrote.

Now as to rig. Plate 19 of Ozanne's Marine Militaire (c. 1762) shows the two alternatives, either three lateens or square courses and topsails on the fore and main with a lateen on the mizzen. He tells us that a chebek might be smaller than that of 14 guns in his plate or might even carry from 24 to 30 guns; Chapman's has 28. Altogether it seems that Falconer had good contemporary authority for most of his description.

A POSTSCRIPT ON A BATTLESHIP, C. 109, EX H.M.S. AGINCOURT

With the *Minotaur* and *Northumberland*, the *Agincourt* belonged to the only group of five-masted battleships ever built for the Royal Navy, and even to this day can still boast of being the longest single screw fighting ships ever to enter the service. After some sixteen years as a stationary boys' training ship, bearing in turn the names of *Boscawen* (III), and *Ganges* (II), plans were drawn up in 1908 to convert her into a coal hulk, and the work carried out at Chatham Dockyard the following year. Completed after her sister the *Minotaur*, she seemed destined to play second fiddle to her for much of her active career, but for longevity of an ironclad battleship she is only exceeded by the *Warrior*, which is still afloat at Pembroke, carrying an oil pipe line.

The description of her and her career as a battleship have been ably dealt with by both the late Admiral G. A. Ballard in the *Mariner's Mirror*, and more recently by Dr Oscar Parkes in his book *British Battleships*, so it would be difficult to improve upon these two well known authorities. With the present reduction in the size of the Royal Navy, the closing down of old establishments, coupled with the passing of the coal burner, the need for her services had ceased to exist, so now that she has been towed away for breaking up, it might be worth while to have a final look at

the vessel which was once the pride of the 'Hoe'.

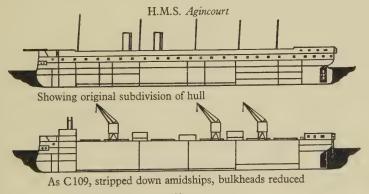


Fig. 1

The transformation to a hulk, costing £34,000, was both drastic and complete. Masts, rigging, boilers and all machinery were completely taken away from her, which operation also included the removal of her screw and shaft, as well as her rudder. Amidships, between the forward and the after athwartships bulkheads she was completely gutted. Both the main or gundeck, as well as the lower deck, were removed, leaving a gigantic void now only subdivided by three bulkheads, as against seven originally. The remaining bulkheads were extended up to the upper deck, dividing the waist into four self contained holds, and the upper deck reinforced from beneath by girder brackets throughout its length. Communication between the holds was made by a 3-foot wide

catwalk on either beam, built on the stumps of the old gun deck girders, entrance ports having been left in the bulkheads.

Externally the alterations were equally severe. Her waist bulwarks were completely cut away and the poop reduced to almost half its former length. Except for a small area on her stem, the whole of her external side plating was removed down to the lower edge of her armour belt leaving her teak backing exposed. A narrow strip of her armour belt, about 9 inches wide, was allowed to remain. This running around the ship performed the dual role of adding stability as well as stiffening to the now skeleton hull. Amidships for about 175 feet, an additional area armour about 2 feet wide was left on her port side to counter the difference in weight of the two sets of cranes she was to carry. When fully laden she could stow 10,000 tons of coal in her holes and with this cargo aboard she floated almost down to the sills of her gunports, which were plated up and faced with timber, the same thickness as her backing.

Into her upper deck, now completely cleared of all its original structures, were cut six large hatches, all on the centre line, two each serving holds nos. 1 and 4, and a single hatch to hold nos. 2 and 3. Two hoppers for filling coal bags were placed on the upper deck, one situated between hatches nos. 2 and 3, the other between hatches nos. 4 and 5. A deckhouse was added amidships between hatches nos. 3 and 4. Between the hatches and the vessel's side, the timbers decking of the upper deck was replaced throughout its length by plating, and upon this was lack a set of rails on either side of the hatches. Five pairs of bollards were added on either beam from mooring vessels to her, and she was given some measure of protection from customers by three

floating fenders along her sides, secured to her by vertical chain pendants.

Three 1½-ton cranes for handling the filled coal bags were mounted on the port set of raths while on the starboard set, she was given the same number of 3-ton cranes fitted with grabs. It was thus that she always took in coal from the colliers to starboard, and discharged it in bags to the waiting vessel to port. The additional strip of armour remaining along her port side balance the unequal weight of the cranes. As her height varied considerably depending upon the amount of coal she had on board, the original specifications of the cranes called for jibs to be long enough to deliver the bags upon the deck of the battleship *Illustrious* when the hulk was in a fully loaded condition.

The poop was cut down to about 40 feet in length. The open space where her two double hand wheels originally stood was now closed in and converted into an engineers' shop. Abaft of this, the large central space within what was the Admiral's quarters, giving access to stern walk which Ballard records never received an official name, was fitted as a mess room. A single cabin was allowed to remain beneath either wing of the poop, but as neither exactly agree with the corrected draughts of 1884, it must be presumed that they were introduced during hulking. Herstern walk remained unchanged except that part of its deck was cut away to allow the fitting of an iron ladder to lead down to the water. A hatchway just forward of the poop gave admission to the 'tween decks aft. The gundeck now stripped of all its original fittings now only housed two large bitts, around which passed the cables of her stern moorings, from the hawse holes cut into her stern. The original provision room below was not greatly altered, and still used at times for stores. With the removal of the rudder, the tiller and rudder post which came up into the provision room, were also taken away, and the opening left in her counter blanked off.

Right forward, apart from the topgallant forecastle, the alterations were less noticeable. The external heads fitted during her training ship days were removed, and almost the entire area of the topgallant forecastle abaft of the armoured bulkhead converted into a boiler house, extending right over to the port side, while at the same time it was built upwards above the forecastle and surmounted with two tall thin funnels. To starboard on top of the forecastle a large winch was placed for moving the cranes. During hulking her shield figure head was removed, but the scrowwork which remained gradually disappeared over the years. Forward of the armoured bulkhead beneath the forecastle was the seamen's wash house which now became another mess room while still retaining some of its original functions for coaling crews. Entrance to this was made by way of the starboard chase gun port and embrasure. The hatchway leading to the decks below was within the forecastle. The gun deck was entirely given over to the forward moorings. Two more

bitts, similar to those installed aft were placed abaft of the armoured bulkhead, and the cables passed from them through the now permanently open armoured doors and out through the hawse holes. On the lower deck beneath, where originally the sick berth was situated, only the cot hooks in the deck head provided any clue as to its former use. It was now partitioned off with a series of wooden slats, and was probably used for storage purposes. The coaming between this deck and the one above where the convalescent bay was placed, still retained its tiled facing to the very end. The popular story told by those working on board was that the slatted partitions on the lower deck were the ship's cells, but in fact these were actually sited abaft of the forward bulkhead, and well within the area now occupied by the forward hold.

Apart from a visit to Chatham in 1922 for docking and overhaul, she has been a familiar sight at Sheerness for over half a century. When she was docked on this particular occasion, the smell from the accumulation of weed and mussels on her bottom was something to be experienced to be appreciated. Now that she has outlived her usefulness she has been sold to the British Iron and Steel Corporation for £50,000. On Trafalgar Day 1960, as Her Majesty the Queen was launching Britain's first atomic warship the *Dreadnought*, a very tired old lady, shepherded by three Sun tugs, slowly made her way up the Thames to Messrs Thomas W. Ward's yard at

Grays, arriving at her last berth on the flood tide early in that afternoon.

Due to the very kind arrangements made by the Admiral Superintendent, H.M. Dockyard, Chatham, Rear-Admiral J. Y. Thompson, C.B., a visit was arranged to the old Agincourt in September shortly before she was due to be towed away. As we went down river to her, still at her old moorings, her familiar profile was altered by the absence of her cranes. As we neared her she was riding very high out of the water with most of her ram showing, and work was in hand of shortening her moorings ready for towing away. In this state she revealed the unsuspected existence of remains of her armour belt, and her stern post devoid of any rudder. Her weathered teak backing despite its age and the rough treatment to which it has for so long been subjected seemed surprisingly good. One interesting fact was noted, that up to the level of the gunports it was laid on horizontally, but above this, vertically. The blanking of the gunports was horizontal but here probably odd pieces which were to hand when she was hulked were used.

Both the poop and the topgallant forecastle had been asphalted over to keep them waterproof, obliterating any deck details which may have remained, but on the poop it was possible to identify the original deck lights and stern davits. The upperdeck amidships, where the timber decking remained between the hatches, was seen to be rotten in several places, and the large towing bollards by the break of the forecastle were the only original feature remaining in this part of the ship. The boiler house and winch had completely changed the appearance of her forecastle since her warship days. Her sadly weathered scroll work remained on her port side, but that on the starboard had largely disappeared long since. Her starboard embrasure together with the gun port and rings for securing tackle were the only remaining signs that she was once a

warship.

The cut up cranes were found thrown into the after hold, but in the others now empty of coal it was possible to recognize the bases of her original wing bunkers, and where the tramway ran along their length. In both nos. 1 and 2 holds, the old boiler beds could be seen. Walking through the gun deck gallery, only the outline of the plated up gunports remained, all other fittings having

been removed.

Below decks apart from the general air of an uncared for ship about to be broken up she seemed quite sound for her age, but this idea was to some extent dispelled a few days later when it was reported that she had sprung a leak, and for a time there were fears that she would have to be beached. This structural failing no doubt influenced the change of plan in sending her to Grays instead of Inverkeithing as was originally intended. Internal lighting seemed to be provided by a number of accumulators, which were seen at both ends of the ship. Back up on deck, it was noted that apart from the galleries she was remarkably free from coal dust. Perhaps her months of unemployment coupled with the traditional English summer had helped to wash away her sins.

As we left this rather forlorn once giant of the Victorian navy, without the balancing weight of her cranes, listing slightly to port. It was hard to realize that in her time she was one of the show pieces of the Royal Navy, boasting the flags of no fewer than fifteen Admirals. Even if she was never called upon to fire a shot in anger, no doubt that the Agincourt and her sisters exercised an authority which even if only salutary, was effective.

References

G. A. Ballard, Mariner's Mirror. British Battleships 1870, Minotaur and Agincourt, Vol. xv., p. 391.

Oscar Parkes, British Battleships, ch. 14, p. 59.

G. A. OSBONN

EIGHTY-GUN SHIPS: TWO DECKS OR THREE

At the end of his study of the development of the line of battle and of the ships which formed it (M.M. 1959, p. 24) Admiral Taylor mentions Pepys's note that the *Harwich* of 1674 was built in imitation of the French *Superbe* and became the pattern for the 70-gun ships built in the later 1670's. To this he adds: 'and hence for the 74-gun ships which formed the bulk of our line of battle in our long contest with France'.

The point is of no great importance, but it may be worth noting that the 74's of the latter pa: (1) of the eighteenth century had not originated as enlarged 70's but as cut-down 80's, the first three of them having been laid down as sisters of the *Newark*, an 80-gun 3-decker on the Establishmer (1) of 1741. The real descendants of the former 70's were the 64's of Nelson's day, first built on the

Establishment of 1745 and then actually pierced for 70 guns.

In considering the claim made for the *Harwich* we have to allow for the fact that Deane, here builder, was Pepys's friend and protégé. No doubt she proved a successful ship, but she did not represent any significant stride in the way of dimensions, for her contemporary the *Royal Oa's* was considerably larger and the *Edgar* of 1688 had been almost exactly her own size. It is a probable that the *Edgar* was quite as good a ship as the *Harwich*, since even Pepys refers to here

builder, Francis Baylie, as 'famous for building good sailers'.

Quite apart from carrying the same number of guns as they did before the days of carronades; and fictitious rating, the Royal Oak has good reason to be considered the ancestor of the later 74's, for she certainly provided the basis for the design of the first 2-decked 80's, and it was their descendants in their later 3-decked form that were cut down to form the new class. Built in 1674, as the heaviest 2-decker yet seen in England she was rebuilt in 1690 with the same length on the gun deck and 10 in. more beam—probably a case of 'furring'—and was then of almost exactly the same dimensions as the 80-gun ships of 1692-94. In 1702 she was even allowed the same armament.

Laughton believed that we had a representation of the *Royal Oak* in Charnock's 'British 2nd-Rate—1665'. This ship has the cipher 'WR' on her quarter-gallery, and Charnock explained this by saying that she had 'undergone a Thorough Repair soon after the Revolution'. The *Royal Oak* of 1690 had certainly been 'rebuilt' from the ship of 1674 and she had some slender connexion with the first ship of the name, built in 1664 and burnt by the Dutch in 1667. A year's discrepancy in date is not serious, but there is the cipher to be accounted for; it is plainly 'WR',

not 'WMR' as it would have been in 1690.

Writing in 1912 about the Greenwich model of the Boyne Gregory Robinson and I mentioned this plate of Charnock's and identified the ship as the Newark on the grounds that she was the only one of the class built after the death of Queen Mary, ignoring the impossibility of explaining the date 1665. Now, nearly 50 years later, I prefer the claims of the Cambridge, which was launched on 21 February 1694/5, 2 months after the Queen's death. In overlooking this ship we were deceived by Old Style dating, as so often happens. It cannot be said that this ship was a 'rebuild' of the Cambridge of 1666, but she was certainly a prompt 'replacement', since her predecessor had only very recently been wrecked. The connexion with the year 1665 is at least

as good as in the case of the *Royal Oak* and there is no difficulty about the cipher. As to the *Newark*, I have a note that her quarter-deck and forecastle ports numbered 16 and 4 as against 14 and 6 in the drawing, but since I have now no idea where I found this information, I do not insist on it as evidence.

There can be no doubt about the model of the Boyne in the National Maritime Museum; the name, date and builder are given on a carved scroll at the break of the poop and the measurements agree perfectly with those of the ship. On the other hand, a model of a ship of the same class in the Rogers collection at Annapolis seems to be unidentifiable. I actually had it in my charge for four years, while it still belonged to the Sergison family, but I never managed to put a name to it.

This model is catalogued as no. 8 in the Rogers collection and is also shown in Nance's, Chatterton's and Culver's books. There are two things about it which ought to make its identification a simple matter, it bears a very clear 'WMR' cipher and there are the initials W.L. on its stand, or were when I knew it. W.L. must be William Lee, who was then Assistant to his father at Chatham and the two 80-gun ships built there were the Sussex of 1693 and the Chichester of 1695.

At first sight it would seem that the model must represent either the Sussex or the Royal Oak, which was also a Chatham ship, but unfortunately its measurements are unsuitable. They do not even fit Robert Lee's original proposals or the dimensions laid down for the 80-gun class in general. The figures are best given in tabular form.

	Gun deck	Beam
Model at 1/48	156 ft.	41 ft. 9 in.
Lee's proposal	157 ft.	40 ft. 8 in.
Establishment	156 ft.	41 ft.
Royal Oak as built	157 ft. 6 in.	41 ft. 4 in.
Sussex as built	157 ft. 2 in	41 ft. 4 in.

The differences are small, but not small enough to be ignored. The model cannot be a true representation of either the Sussex or the Royal Oak, though it is quite likely that it is very near one or other in appearance. The fact that its quarter-gallery is somewhat old-fashioned as compared with that of the Boyne or of Charnock's ship may be due merely to conservatism on Lee's part, but the unusual projecting gallery across the stern may perhaps point to a rather special ship. On the whole, if a named drawing of a ship like the model should ever be found, I think the name is more likely to be Royal Oak than anything else.

As a class these 80-gun ships were unsatisfactory, both in their original 2-decked form and afterwards as 3-deckers. The story of the change made in 1694 and the reasons for it has already been given in *The Mariner's Mirror* (1914, pp. 203-6); they had proved weak structurally and it was decided to remedy this by extending the very long quarter-deck to meet the forecastle and so form a third complete deck. At first the distribution of the guns remained as it was and the ships were what Laughton called 'three-deckers spoilt', with guns at either end of the upper

deck and none amidships.

This part of the story is illustrated by the model of the Chichester in the National Maritime Museum, a rather poor model of an ugly ship. She had been 'rebuilt' in 1706, only 11 years from her first appearance, and the 'rebuilding' in her case must have been drastic, since the new ship was 1 ft. 9 in. shorter on the gun deck than the old and 1 ft. 10½ in. wider. Her dimensions were in fact practically those of the Establishment made in the same year, but under that the 'empty waist' was filled in and the upper-deck ports ran continuously fore-and-aft. This second Chichester lasted longer than the first and was one of those 80-gun ships of which Admirals complained vehemently. In 1743 Matthews wrote that she had tried to open her two aftermost lower-deck ports and had been forced to shut them again, while 'as for the rest of her ports, they were caulked in when she was first fitted out and have never been opened since, nor will they ever be, except in a Mill Pond'.

In spite of their obvious shortcomings three-decked 80's continued to be built until 1759, the last being the *Princess Amelia*, although the two-decked 74 was well established by then and was proving far more serviceable. With their size growing from one Establishment to the next they provided a good example of the way in which any class of ship tends to work up to the dimensions of the class above it; the 80-gun *Cambridge* of 1755 was almost exactly the same size as the 90-gun *Marlborough* of 1732 or the 100-gun *Royal William* of 1692.

Models of these eighteenth-century 80-gun ships are rare; I only know of one good examples a rigged model of one of the ships of the 1719 Establishment in the Science Museum. There is also a block-model in the National Maritime Museum of either the third Newark or simply the

Establishment of 1741, on which she and the first three 74's were built, and that is all.

Fortunately there are draughts of ships on all four Establishments to show how the type developed and it is interesting to see how the 'three-decker spoilt' gradually became more and more like a smaller edition of a normal 3-decker. The most noticeable change, after the redistribution of the ports on the upper deck, was the addition and subsequent growth of the forecastle. When first the idea of giving the 2-decked 80's a complete third deck was approved, it was expressly stipulated that no forecastles should be built on them. This was adhered to in the Establishment of 1702, but a very small platform forward appeared in 1719 and a short forecastle introduced in its place in 1733 became longer in 1741 and still longer in 1745. At this final stage the armament became heavier as well with the replacement of 12-prs. and 6-prs. on the middle and upper decks by 18-prs. and 9-prs. The lower deck had carried 32-prs. from the first.

Except for the few survivors of the 3-decked 80's the 74-gun ship remained the heaviest the 3rd-Rates for some 40 years. Then, with the launch of the Caesar in 1793, the 80-gun ship reappeared in its original 2-decked form, but very much larger than it had been a century earlier; the new ship was about 25 ft. longer and 9 ft. wider than the first 80-gun class and fired a broad-side nearly 50 per cent heavier. This time no structural weakness was found and 2-deckers of 80 guns continued to be built. In 1833 the Rodney showed that 90 guns could be carried on a similar design, and if the introduction of steam had not changed everything there might even have been 2-deckers of 100 guns.

A NOTE ON THE MARINER'S MIRROR INDEX

The following body of rules for the *Mariner's Mirror* Annual Index has been arrived at as theoretical stocktaking.

The proposals introduce few and unimportant alterations to the present system, which bears

marks of many modifications unobtrusively made over the past few years.

With these alterations, we should have an index in complete accord, so far as its mechanism is concerned, with modern thought on the subject. The choice of entries is of course a matter which cannot become the subject of rules; it is the expression of the compiler's personality, and the only expression of it allowed by a somewhat arid, but quite absorbing pursuit. The only remedy for shortcomings in this respect is the simple one of finding a new indexer.

Constructive criticism by serious and experienced users of the Index would be most welcome.

Multiplication of indexes

It is a normal rule of indexing that there should be a single index for all entries—a rule which in the past we have signally disregarded. It will be remembered that we once had no fewer than five different indexes—an infuriating business. Three were quietly absorbed. The retention as a separate entity of the Ships' Names index is thought to be quite justified. The ships would necessarily be grouped, if included in the General Index, under a special subhead (as are, for instance, 'Books Reviewed'), and would therefore amount to an index within an index. Give or take a hundred, there are generally about as many ship name entries as general ones. Add, that the ship names differ from all the others, incorporating a date and nationality coding, while the

NOTES 22 I

general entries are much more discursive in nature—and the separation is fully justified as a special case.

Parenthetically, would authors where it is convenient submit a list of dates of launch of all ships mentioned? This involves a great deal of search; authors are not of course asked to undertake this except when they have the information at their fingers tips.

Arrangement of entries

Small alteration seems called for in this important matter. When necessary a catchword is chosen to lead a series of connected entries; the latter (and subheadings if necessary) are indented two or three spaces. No system of dashes (to indicate the missing catchword) and no special typographical devices are employed.

Care is taken that the catchwords are true ones for the group—not, for instance:

Bacon, 76

, and eggs, 131

, Francis, 220

, Roger, 5

Where proper names are in small capitals, they indicate the author of the matter immediately following. A separate heading in normal type is used for any other mention of the same name.

Cross entries have been increasingly used in the past, and will continue to be. Every article, for instance, will be found under its author's name in the proper alphabetical position of the latter; in its own place in the word for word form of the title, and under as many catchword

headings as seem desirable.

There has been a certain pedantry in the use of Latin (sometimes Dog Latin) forms of reference, such as 'et seq.', 'quod vide', 'supra', 'infra', and abbreviations of these and others. These will in future be anglicized to 'f.' and 'ff.' (for one or more consecutive pages), 'see' 'above' and 'below', and so on. One piece of quite good Latin does seem to have no exact English equivalent —'passim'. It will be retained to indicate a subject that is treated in general over the pages indicated, without necessarily being mentioned on each. When, on the other hand, a subject is coincidentally mentioned on successive pages, separate references will be given.

When references are to notes, they will be so indicated, a small but annoying omission in the

past.

Consecutive pages will be indicated, e.g. 123-9 (but 117-24), and not 123-129.

Alphabetization of entries

r. Entries will be strictly in alphabetical order up to the first punctuation mark; beyond that stop, the alphabetical order will influence the order only of entries identical up to that point.

2. When catchwords are identical in form but differ in meaning, the order observed will be: (i) people, (ii) places, (iii) things, (iv) adjectives, thus:

Bacon, Francis

Bacon, tn, Philippine Is.

Bacon, curing of

White, Charles
White, Chinese
White Lead

3. For use in catchwords, nouns in the singular include the same word in the plural or possessive and vice versa.

Boyle, Founder of Royal Association, Law

The substantival form of the word is kept separate from the adjectival when they are spelt differently:

Julius Caesar Julian Calendar 4. Foreign words, names in particular, appear often among our entries. These often include the 'umlaut', or modification, which has been troublesome to indexers. There are three schools of thought in dealing with it: (a) treat \ddot{a} , \ddot{o} , \ddot{o} , \ddot{u} etc. as ae, oe, ue, etc. (as they originally were), and alphabetize accordingly; (b) neglect the sign and proceed as though the vowel were unmodified; and (c) regard the letters as something quite extraneous and relegate them to a post-z position. The latter is what we have done in the past, and seems to get the worst of all worlds. Course (a) has respectable backing, and will be adopted in future. Other letters from foreign alphabets will be treated, as though they had been transliterated—e.g. $\Theta \acute{a}\lambda a\mu os$ will be indexed as though it read 'thalamos', 'p' and 'o' as though they were written 'th'.

Russian transliteration is a jungle. A recent volume of M.M. included references to half c

Russian transliteration is a jungle. A recent volume of *M.M.* included references to half a dozen Russian ships in two different articles, and the names as transliterated were barely recognizable. This is an editorial matter, and the British Museum catalogue system seems best—it

has no uncommon typography.

5. Proper names (including those of ships), if simple, will obey Rule 1 above, the Umlaurule applying. The Umlaut, by the way, should be distinguished from the identically shaped diaeresis, which indicates that two vowels one might expect to form a diphthong in fact do not—e.g. La Roërie. Compound names, if English, will be entered under the last element, unless hyphenated. 'Laughton, Carr,' but Jones-Evans'. Cross-references would be given to 'Car Laughton' and 'Evans, Jones-'. Nearly all foreign compound names are hyphenated.

6. Prefixed names. (a) All forms of 'Mac-, 'Mac', 'M', 'Mc', are indexed as though beginning 'Mac'. (b) Names starting with 'Saint' or any variation or abbreviation thereof—'S.', 'St', 'Ste.', 'San.', 'Santo', 'Santa', 'Sv.', etc., will be indexed as if beginning 'Saint' When Saint is used as the title of a canonized person, the entry will be under the Christian name—'Augustine, Saint', but, 'St Augustine's College'. (c) All other prefixes—'Ap', 'O'', 'Fitz', and so on, are treated as part of the name. (d) Foreign prepositions and articles:

(i) If the bearer of the name is of the English-speaking race are regarded as part of the name—

'De La Rue', 'Delarue'.

(ii) If the foreign name is written as one word, it is so indexed.

(iii) If the prefix is an article and/or normally capitalized, it forms part of the name: 'Des',

'Du', 'L'', 'La', Les', 'Lo', 'Im'.

(iv) If a preposition and/or normally not capitalized, it is dropped from the catchword: 'd'', 'da', 'da', 'de', 'degli', 'del', 'della', 'delle', 'di', 'do', 'van', 'van de', 'van de', 'van 't', 'von', 'von der' ('dem', 'den'). By convention 'De La' is divided, the article treated as part of the name, the 'de' treated as above, e.g. 'La Valée-Poussin, C. T. de'.

(v) Bearers of titles will be indexed under those used in the text, with cross-reference to any

better known one gained later, e.g. 'Wellesley'-'Wellington'.

(vi) Latinized names of medieval worthies are generally those in common use, and will generally be indexed without cross-reference. 'Mercator', not 'Kremer', 'Copernicus', not 'Zeppernik', 'Vergil', not 'P. Virgilius Maro'.

(vii) Where two people share a reference, the first will be 'indexized', the second not. A cross-reference will reverse this: 'Warner, Oliver and R. Taylor', and 'Taylor, R. and Oliver

Warner'.

(viii) Geographical names. The part descriptive of the geographical feature will not normally form part of the catchword: 'Horn, Cape'. But 'Monte Cristo', 'Isle of', 'Fort William', 'Lake City'. Compound place-names will always be entered as such, though not hyphenated: 'Langton Matravers'. Descriptive adjectives, when used to distinguish groups of places, do not appear in catchwords:

Roding, High , Leaden , Margaret.

But, 'High Wycombe', there being, so far as one knows, no 'Low Wycombe'. Words denoting political status are dropped: 'Canada, Dominion of', except 'United States of America'. In case of doubt, the Gazetteer of the *Encyclopaedia Britannica* will be taken as the authority.

Finally, an Index exists for the convenience of the reader, and not vice versa. And, where a broken rule is likely to be helpful to the reader, it is to be hoped no pedantry will ever prevent its being broken.

THE INDEXER

COPYRIGHT, PIRACY, AND THE PRACTICAL NAVIGATORS: THREE NOTES

(see M.M., Vol. 46, No. 3, p. 207)

Mr Skelton's notes and documents concerning John Hamilton Moore have prompted the

following notes.

1. Moore's trials for violation of copyright. Mr Skelton's documents 2 and 3 are to be found in the back of Moore's New Practical Navigator, 13th edn. (London, 1798) on leaf 3C2r and v, immediately preceding the catalogue of Moore's nautical publications. The accounts of the trials may therefore be presumed to be those most favourable to Moore, a conjecture which is borne out by an examination of the report of 'Sayre and others v. Moore' given in 1 East, 361 as a footnote to another case involving a copyright. (Incidentally, Sayer appears to have attempted in 1784, the year preceding the suit against Moore, to have his partnership with Bennett dissolved

on the grounds of the latter's insanity. See 'Sayer v. Bennet', I Cox, 107.)

In both the cases described by Mr Skelton the verdict was to Moore, the defendant. However, Moore lost a similar suit brought by W. Heather of 157 Leadenhall Street, apparently some time in 1800 or 1801. 'Heather v. Moore' was tried after term at the Guildhall before a special jury of merchants with Lord Kenyon presiding. The case is described in a pamphlet of four pages, Trial of John Hamilton Moore, for pirating a chart, printed by T. Plummer and bound with the copy of David Steel, The Ship-master's assistant and owner's manual, 9th edn. (London, 1801) present in the Kress Library, Graduate School of Business Administration, Harvard University. Following the pamphlet in this volume is Heather's catalogue of nautical publications dated 1 May 1801.

Moore was charged in this case with copying Heather's 'A New and Correct Chart of the Coasts of France, Spain, and Portugal'. The witnesses for Heather were Captain John Stevenson (who had testified for Moore in his two previous trials) and J. Norie. In Heather's 1801 catalogue Stevenson is listed as the author of 'A New Chart of the English Channel' and the *British Channel Pilot* (1801); Norie, as the keeper of a 'naval academy' at Heather's address. Curiously, Heather's

catalogue also lists for sale the 14th edn. of Moore's New Practical Navigator.

Moore's defence at the trial was not that his chart was not a copy of Heather's; Moore's counsel freely admitted that it was! Rather Moore claimed that Heather, far from having any sole right in his chart, had copied it from earlier editions of Moore's. Though Messrs Warner and Chapman, engravers, and Messrs Hall and Sayes (could this be Sayer?) appeared as witnesses for Moore, their testimony could not overcome that of Stevenson and Norie. The jury quickly found for the plaintiff, and an injunction was later granted under which Moore's plates were cut to pieces and his stock of charts destroyed. After an account of the trial, obviously biased towards Heather, the pamphlet concludes with a long list of the errors in Moore's defunct chart.

2. Moore's New Practical Navigator and its American successor. We must all look forward eagerly to Captain John F. Campbell's forthcoming book on Bowditch's Navigator. Meanwhile, those concerned with its history will find a short account in Harold L. Burstyn, At the Sign of the Quadrant (Mystic, Conn.: Marine Historical Association, 1957). Since they will serve also as

background to my third note, perhaps some comments here may not be amiss.

Any account of Bowditch's services to navigation must begin with the man who instigated and published his work, Edmund March Blunt. Blunt was born in Portsmouth, New Hampshire, in 1770, and he opened a bookstore in Newburyport, Mass., in 1793. The thriving sea commerce of the town soon led him to concentrate on nautical items, and a list of the items he had for sale in 1798 is nearly identical with that of Moore's. Not content with importing books and charts from England, Blunt aspired to publish his own. His first venture was *The American Coast Pilot* (1796), nominally by Captain Lawrence Furlong, but in fact a compilation drawn up by Blunt

himself. This pilot became the standard in its field and went through 21 editions before the U.S.

Government bought the copyright in 1867.

Having established his own edition of a coast pilot, Blunt seems next to have desired his own navigation text. Accordingly he copyrighted in May 1798 The New Theoretic and Practical Navigator...revised and corrected by Nicholas Pike (Evans 33433). Pike was a well known mathematics instructor in the neighbourhood; he had graduated at Harvard College in 1766 and published an arithmetic book in 1788. Since no copies of this Navigator are known, it is doubtful that Blunt ever issued it in the form in which it was copyrighted.

Meanwhile, Nathaniel Bowditch of Salem had completed the first two of his voyages, sailing as supercargo with Captain Henry Prince. During the first of these voyages Bowditch worked out a new method for working lunars, and during the second he noted a number of errors in Moore's Navigator. There appears to be no record of how Bowditch and Blunt first got together, but all accounts agree that it was Blunt who persuaded Bowditch to prepare his materials for publication. This Bowditch did on his third voyage, and shortly after his return in April, 1799. Blunt copyrighted The New Practical Navigator...The first American from the thirteent's English edition of John Hamilton Moore. This edition was published in September, and to it Blunt contributed a preface in which he thanked not only Nathaniel Bowditch but also his brother William, and Nicholas Pike. A second edition, incorporating corrections which Nathaniel Bowditch made while ashore for a few months in 1799, was published by Blunt in 1800. Neither edition carries Nathaniel Bowditch's name on the title page, however both contain it in Blunt's preface: Mr Skelton's statement that the 'edition of 1800 was the first to bear Bowditch's name' is thus incorrect.

Just before Bowditch sailed on his fourth voyage (1799–1800), Edmund March Blunt went aboard his ship. In the presence of Captain Henry Prince, who recalled the conversation after Bowditch's death, Blunt urged Bowditch to revise Moore's book completely. This Bowditch did, and the new work was published under his own name in 1802 as *The New American Practica!* Navigator. Blunt printed this work in 1801, sailed for England with a copy, and sold it to David Steel and James and John Hardy (for 200 guineas) on the condition that the American and English editions appear simultaneously. So they did, the English edition under the title of *The Improved Practical Navigator*. Moore's 'caution', which Mr Skelton suggests resulted from a loss of sales to his rivals' work, actually appears with slight variations in wording on p. viii of the 13th (1798) edition of *The New Practical Navigator*.

3. Edmund March Blunt's suit for violation of copyright. Blunt moved from Newburyport to New York about 1811, and his business continued to prosper. Ever zealous of his reputation, Blunt was led, following a rumour that the directions in his Coast Pilot for entering Saco (Maine) harbour were inaccurate, to charter the sloop Orbit and sail from New York to check them. Then

Orbit put into Boston for a day, and when she sailed to survey Georges Bank and the Nantucket Shoals she was accompanied by the gunboat *Science*, lent by the commandant of the Boston Navy Yard, Captain Isaac Hull, U.S.N. In the course of the survey Edmund Blunt (son of Edmund March Blunt) and Chaplain Cheever Felch, U.S.N., found that the latitude of Nantucket South Shoal was 41° 4′, and not 40° 44′ as shown on existing charts. This survey was

made in June 1821.

In October Edmund March Blunt copyrighted a new chart, showing Nantucket South Shoal in its new location and thereby shortening the sea route from north-west Europe to New York. This copyright was granted under the provisions of the Acts of 1790 (1 Stat., 124) and 1802 (2 Stat., 171). The first act provided copyright protection for 14 years to any 'map, chart, book or books', and prescribed the form of the copyright which was to be granted by the Clerk of the Federal Court in the district where the work was published. The second act required that a copy of the copyright be printed in the work, if a book, and that, if a chart or map, the words 'Entered according to Act of Congress' with the date and district to be printed on the face.

In 1827 Richard Patten, a competitor of Blunt's in New York, published a chart of the same area. Since the Act of Congress of 15 February 1819 (3 Stat., 481) had provided that the Federal Circuit Courts were to have jurisdiction over suits brought under the copyright laws, Blunt applied

in the June term of 1828 to the Circuit Court at New York for an injunction against Patten. The Court denied the injunction, citing at length the opinion of Lord Mansfield in 'Sayre and others v. Moore (see Note 1 above), and sent the case for trial by a jury to determine whether Patten had in fact copied Blunt's chart, or whether, as Patten claimed, the information came from

another source (Fed. Cas. 1580, 2 Paine, 397).

A trial was accordingly held. Patten claimed, first, 'that his information came from a survey by a British officer of whom only he seems to have heard, and, secondly, that since Cheever Felch had deposited a copy of the chart in the Navy Department it had thereby become public property. The jury heard an impressive number of sea captains testify that they had always credited Blunt with the discovery of the Nantucket South Shoals' true latitude, and they accordingly found that Patten had indeed copied Blunt's chart. The court then dismissed Patten's second contention and issued an injunction in Blunt's favour (Fed. Cas. 1579, 2 Paine, 393). Accounts of the trial in 'Blunt v. Patten' may be found in Niles's Register for 7 June 1828 and in the pamphlet Trials between Edmund M. Blunt vs. Isaac Greenwood, for a libel: and Edmund M. Blunt vs. Richard Patten, for infringement on Copy Right. This pamphlet, of which the only known copy is in the New York Public Library, was apparently printed by Blunt for advertising, and its account of the trial is therefore biased. Blunt's suit against Greenwood, another competitor, and his further career are beyond the scope of these notes. An account may be found in Burstyn, Quadrant.

H. L. BURSTYN

SHIPWRECKS IN ANTIQUITY

It is not surprising that specific details of shipwrecks in antiquity are almost completely lacking. Usually the craft were frail, and when a ship went down the loss of life and property was generally complete. A multitude of such wrecks dating from Greek and Roman times litter the bottom of the Mediterranean, and with the development of the aqua-lung these have been located in rather great numbers. However, the concrete evidence of shipwrecks does not concern us here. We

are interested only in texts or illustrations referring to shipwrecks.

The first account of a shipwreck comes from a remarkable Egyptian text which can be dated about 1900 B.C.² The story is told in the first person, and is an eyewitness account of the sole survivor of the wreck. 'I had set out for the mines of the king...in a ship 180 feet long and 60 feet wide, with a crew of 120, the pick of Egypt. A storm burst while we were still at sea; we flew before the wind. The ship went down; of all in it only I survived. I was cast upon an island.' So the words echo out of the past, referring to an incident which was probably rather commonplace in antiquity.

It has always been assumed that the 'mines of the king' were those in the Sinai Peninsula, and that the ship left Egypt from some Red Sea port such as Koseir. The story of the shipwrecked sailor starts on board a ship sailing north on the Nile River through Nubia to the 'Residence', generally taken to be at Elephantine in Upper Egypt. The narrator tells of a time when he was shipwrecked, and cast upon an island where a huge talking snake lived. The snake told him that eventually a ship would come from the Residence with sailors whom he would know. Erman commented that this was not to be taken literally, for 'one cannot get by ship to the Red Sea from any Egyptian town'. However, this comment was necessary only because Erman unnecessarily assumed that the 'mines were located in Sinai. Actually very important mines (gold and copper) were located in Nubia, south of the Residence. As the snake predicted, a ship did

I For a summary of this phase of underwater archaeology, see L. Casson, *The Ancient Mariners* (New York: Macmillan Company, 1959), pp. 189–97, with a selected bibliography, p. 259. A ship dated about 1400 B.C. (oldest wreck ever found) is reported by P. Throckmorton, *National Geographic Magazine*, Vol. 117 (1960), pp. 682–703.

2 A. Erman, The Literature of the Ancient Egyptians (London, 1927), pp. 29-35. The text

is dated to the Middle Kingdom, a period from about 2052-1786 B.C.

3 Ibid. p. 32.

finally come, and the shipwrecked sailor tells how 'Then we voyaged northwards to the Residence ... which we reached in two months'. The geographical details given in the account leave no doubt that the voyage was made on the Nile River, heading south into Nubia and perhaps beyond on the outward leg. The fact that it appears to be written with reference to saltier ocean travel cannot controvert the geographical facts given. It would be perfectly possible for a ship to sink on the Nile with great loss of life, and for a survivor to be isolated on an island in crocodile-infested waters. There is one further point. Since the account specifically says that the rescued man sailed north, this would mean that the shipwrecked ship was south of some Red sea port. This would

be almost impossible, since Sinai is north of virtually every Egyptian seaport.

It is now evident that the mines referred to by the shipwrecked sailors were not located in the Sinai Peninsula, and that the ship did not depart from an Egyptian port on the Red Sea. But ships did sail for the mines in Sinai which were worked mainly for copper and turquoise. We can now almost positively identify the port for which such ships departed. W. F. Albright discovered at Markhah, at the southern end of Abu Zuneimeh Bay in Sinai, an ancient port dating from approximately the fourteenth to the thirteenth centuries B.C., which certainly served the Sinai mines.² This site was revisited by an Israeli archaeological expedition, which confirmed that the site was fairly homogeneous.³ In looking for a port used in later times, Aharoni discovered a second tell near the sea about a half mile south of the Egyptian port.⁴ It was covered with sand and he did not excavate it, so its date remains unknown. However, he did conclude that the bay of Abu Zuneimeh served as the chief port in this district during various periods in which the mines were worked.

While the destination of Egyptian ships sailing for Sinai can be pin-pointed with some assurance, such is not true of their port of departure. Sometime during the twentieth century B.C., Pharaou Senusret dug a canal from the northern end of the Nile River to the Red Sea. A ship could have left from a port near the head of the Gulf of Suez. Or a ship could have left from some more southerly Egyptian port. No ancient Egyptian ports have been located in the Gulf of Suez. During Roman times a series of roads criss-crossed over the mountainous Eastern Desert, and it is certain that ports were located at the Red Sea extremities of these roads, even though the actual remains have not been found. There is evidence that some of these roads were built and used only during Hellenistic and Roman times. Some probably were only infrequently used before this. The only known ancient Egyptian port on the Red Sea was located somewhere near Koseir. Between here and the Nile River was located one of the most used roads between the Nile and the Red Sea, and many inscriptions, some relating to sea voyages to Punt, are found cut into the rocky walls.⁵

1 A. Erman, op. cit. p. 34. Erman makes no comment on this passage, which clearly indicates that the ship sailed *directly* to the Residence.

2 W. F. Albright, 'Exploring in Sinai', Bulletin of the American Schools of Oriental Research,

No. 109, February 1948, pp. 10ff.

3 Y. Aharoni, 'Recent Discoveries in the Sinai Peninsula', Antiquity and Survival, Vol. 11 (1957), p. 287. During the short period in which the Israel Defence Army held the Sinai Peninsula (normally Egyptian territory) in the Suez crisis, no less than six Israeli archaeological expeditions visited the area. Also of interest to maritime historians is the discovery of an island off the very end of the Sinai Peninsula (at Ras Muhammad) on a small tell with Roman sherds (ibid. p. 290). While the island was only about 65 ft. from the shore, the water was shallow. But the discoverers reported that it was very difficult to reach from shore, and concluded that the stronghold was a look-out and possibly a lighthouse that watched out for or guided boats headed from the Gulf of Suez to the Red Sea. The discovery of Roman pottery does not necessarily mean that the site was occupied by Romans. The pottery only indicates that the place was occupied during the Roman period, when typical pottery circulated throughout the whole of the Middle East.

4 Ibid. p. 288.

5 J. H. Breasted, Ancient Records of Egypt (Chicago, 1906), Vol. 1, pp. 208-10, for Eleventh Dynasty inscription of Henu, about 2000 B.C.

There are other tales of shipwrecks to be found in Greek and Roman literature, but the earliest of these is hundreds of years after the Egyptian account. We will now turn to representations of ancient shipwrecks. There is a Roman relief in the Ny-Carlsberg Glyptothek in Copenhagen dating from about the third century A.D. This has been published as the earliest detailed representation in existence of a 'crisis at sea'. The relief shows a floundering man who has presumably fallen out of a small boat as one boat tries to reach him, only to have to change course to avoid hitting another boat. A shipwreck is not involved, but it is to be presumed that the man shown drowned, for the relief is found on a coffin. And there do not appear to be scenes depicting shipwrecks from Roman times.

The first representation we have of a shipwreck comes from a strange quarter. It is shown painted on a geometric Greek krater excavated in Italy. The vase comes from Ischia, an island just off the west coast of Italy near Naples.² According to the excavators, the bulk of the material found belongs to the eighth and seventh centuries B.C. Mr Dietrich von Bothner tells me that the krater can be safely put in the late eighth or early seventh century B.C. For purposes of discussion, we may say that it dates from around 700 B.C. The scene on the krater shows a capsized ship floating near the rim of the vessel, with the unfortunate crew desperately trying to swim away from hordes of voracious fishes which outnumber the sailors almost four to one (Fig. 1). There are six men shown in the water. One has been devoured by a fish; at least his head is in the mouth of a monstrous fish. Near this same fish is a man whose torso has been devoured by a fish. And on the other side of the fish is a man without an arm. A man appears to be swimming (the crawl stroke) away from a fish with an open mouth full of sharp teeth. Another man may be already drowned, for he has his arms by his sides in a relaxed position. The last man appears to be holding on to the ship's prow. This representation is certainly unique, both for its subject and for the liveliness of the drawings.

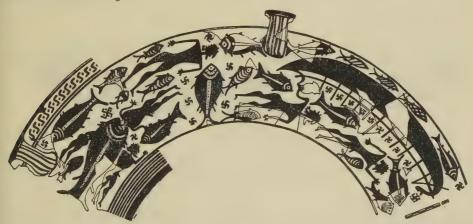


Fig. 1. Scene painted on a Greek krater of about 700 B.C. showing a capsized ship with the crew being pursued and eaten by hordes of fish. (After Stoop, *Antiquity and Survival*, Vol. 1 (1955/6), p. 267.)

This representation is particularly significant in regards to the period from which it comes and the site at which it was found. According to Thucydides, among others, Cumae (on the Italian

I L. Casson, 'A Sea Drama in Stone' American Neptune, Vol. xv (1955), pp. 217-19; L. Casson, Fore-and Aft Sails in the Ancient World, M.M., Vol. xLII (1956), pp. 3-5; L. Casson, The Ancient Mariner (New York, 1959), pp. 220-2, pl. XIIIa.

2 J. M. W. Stoop, 'Some Observations on the Recent Excavations on Ischia', Antiquity and

Survival, Vol. 1 (1955/6), pp. 255-67.

mainland just north of Ischia) was the oldest of the Greek cities found in Italy and Sicily, and was supposed to have been founded about 756 B.C....¹ But another tradition given by Livy and Strabo relates that the founders of Cumae first settled themselves on the Island of Pithecusa (Ischia) before establishing themselves on the mainland. Between 750 and 550 B.C. the Greeks settled themselves the length and breadth of the Mediterranean and the Black Sea, like 'frogs on a pond' as Plato put it. Ischia is now taken as the first settlement of the Greek penetration into the area of the west coast of Italy. To the north of Naples, Italy was controlled by the Etruscans at this early period. It is thus perhaps not remarkable that this painted Greek krater from the first Greek settlement depicts a maritime scene. But it is particularly significant that it is a shipwreck, for it indicates that such occurrences were perhaps more commonplace in those ancient times than we are now led to believe.

It will not be out of place to consider the ship on this vase in some detail. The published drawing of the painting of this Greek vessel is not technically correct, since the krater actually necks in at the top, while the drawing of the painting has been executed in a manner which assumes that the vessel was a flared cup with straight sides (Fig. 1). This means that the top of the painting had to be stretched out slightly more than actual size. I have taken the ship on the published drawing and projected it on a flat plane to take out the curve, using the solid line at the top of the krater as the base line, but taking a line just above the gunwale as the longitudinal reference datum, so that the bottom of the ship is shortened and the top lengthened (Fig. 2). This ship has a number of points in common with the ships we generally recognize as galleys found on the Greek geometric vases of the same general period.² We see a number of vertical posts projecting above the gunwale. Stoop extended one of these above the others, but there is no comparative basis for this; it is too far aft to be a broken mast. The sheer at the gunwale is almost flat like the older examples, and there is a 'rail' above the gunwale, which appears to be a fighting deck in some examples.

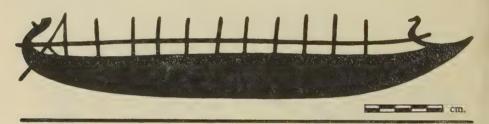


Fig. 2. Ship from the Greek krater of about 700 B.C. It has been projected to take the curve out of it. In general it looks like a galley of the period, except that the bow curves up too much, bringing the ram above the gunwale line. (Original drawing by the author.)

The stern curves up and inward in a manner which was to be typical of galleys down to Roman times. However, the bow of this craft is executed in a strange manner. Invariably the comparative material shows a ram at the bow as an almost horizontal extension of the keel (or the line of the bottom of the vessel). In our present case the bow curves up drastically, and if this point at the bow is actually a ram, it is evident that it would not be very effective, for it would ride up over an enemy gunwale. There is a possible explanation for this anomalous detail. A handle on the krater projects right under the curve of the bow, and the artist may have curved the ram over it

I Stoop, loc. cit. p. 255. Some scholars would place the founding of Cumae at a later date. Cf. C. Roebuck, review of G. Vallet, Rhegion et Zancle, in American Journal of Archaeology, Vol. LXIV (1960), p. 106, where the founding of Cumae is placed c. 740 B.C. and the founding of the settlement on Ischia at 770 B.C.

2 A large number of these are shown by A. Koster, Das antike Seewesen (Berlin, 1923), pls. 18-24.

when he found himself a little short of space. This view is strengthened by the fact that both the gunwale and the rail curve up at the bow, where on all of the comparative material they are straight. If there is no error in the drawing, we have a representation of a new type of vessel, but the evidence does not favour such a view. Since only one vessel is shown, and since no arms are shown, we may suppose that this was simply a disaster at sea which happened to some voyagers. It may well have been a galley used by the colonists.

WRECK OF THE LOO

(see M.M., Vol. 47, No. 2, p. 139)

The wrecks of H.M.S. Loo or Looe (the name is spelt both ways in the Admiralty records) and the Snow were found in 1950 on the outer reef of the Florida Keys. The account of the salvaging of these ships is in Treasure Diving Holidays by Jane and Barney Crile.

D. A. RUMBELOW

FLYING ROYALS

In what follows it is assumed for brevity that the sail is a royal but it might be a skysail or, under certain circumstances, a topgallantsail.

There were at least three ways of rigging one:

(a) The clews were becketed or lashed to the topgallant yardarms. There was either no topgallant stay or (usually) one set up with a tackle, that passed over the royal yard and was bent to a traveller that slid on the royal mast. When the sail was furled the traveller was down by the topgallant masthead, when set the traveller slid up toward the royal masthead, the stay being cast off and set up as required. According to books the traveller simply was carried up by the yard but if there was a flying-jib or topgallant staysails there had to be a tricing line or jigger from the traveller to the royal masthead, for it then carried the stays of these sails (if any) and the blocks of their halyards and it had to be kept above the royal yard. Perhaps only in American ships (it is not mentioned in European books) was there a downhaul which served to keep the royal parallel and close to the topgallant yard when it was clewed-down. One end bent (say) to the starboard side of the royal yard about halfway between the slings and the yardarms, it went vertically downward through a thimble in a strop or a hole in a cleat on the topgallant yard, through a block or fairlead at the topmast cross-trees, through a loose thimble and then followed the same path up on the port side and made fast to the royal yard. Around the loose thimble was seized a line that went down to the deck.

The sail was furled upper topsail fashion.

(b) There was a standing topgallant stay and every time the sail was set or taken in, one clew and one yardarm were dipped around this stay. When the sail was furled beckets on the topgallant yard went around the royal yardarms and confined the royal yard; the tie was cast off and hitched to the stay so as not to prevent clewing down the topgallant yard. When the mizzen topmast and topgallant mast of Mediterranean polacres were in one spar—no topmast cross-trees but a standing topmast stay—their mizzen topgallantsails were set in this manner, and I was told they were taken in simply by veering the halyards and weather sheet until the weather yardarm blew over and sank beneath the topmast stay. The topgallant yard would then swing alongside the topsail yard (the topgallant yard had a sort of truss to hold it in to the topmast) with the weather leech stretched along the topsail yard and the clew near the stay. The clew was retained there long enough to take the weather sheet out of it, dip it around the stay, and put it back in the clew; the sheet was then hauled home, the yard put in the beckets and the sail furled—upper topsail fashion.

(c) The royal was set and taken in from the deck. I think men-of-war used this method exclusively. The sail was furled in stops with the clews out and at the yard arms. Suppose it was going up on the starboard side, the yard rope was overhauled down to deck, bent and stopped out to the port quarter, a tripping line was bent to the starboard yardarm, which was 'tended as

the yard went aloft. When the port yardarm got up to the topgallant yard a hand who had overhauled the port sheet over the topgallant stay put it in the clew and another in the rigging who had overhauled down the starboard sheet put it in the starboard clew. When the slings were high enough to clear the topgallant stay, the stop was cut, the tripping line let go, the yard fell across and the sail was sheeted home and mastheaded, the stops breaking. The tripping line remained in place when the sail was set and it was taken in by simply manning the ripping line and 'tending

the halyards, the sheets being cast off by men aloft as the yard went down.

Except that in methods (b) and (c) there was sometimes a strop (or traveller) with a thimble seized in, through which the tie passed before being bent to the yard, and which (sometimes having a line bent to its after-side which went down along the backstay to the deck) served to hold the yard in to the mast, there was no other gear than that mentioned. Steel, Rigging and Seamanship, 1794, says there were braces but I think they were very exceptional. The tension in the leeches held the yard parallel to that below and, in the days of flying royals, it was not the practice to carry even standing royals by the wind. There were no footropes on the yard. Despite what is suggested in some of Baugean's engravings, one sail flying was not set over another flying—if the skysail were flying the royal was standing—the men handling the sail set flying had to

have something to support them.

Methods (a) and (b) are mentioned by writers of various nationalities and I knew an old sailor familiar with (a) and not (b) nor (c). Yet although one would think (a) and (b) well suited to merchant ships, it is difficult to find pictorial evidence of their use. One can find a great many pictures emanating from the period roughly 1780–1825 where ships are carrying royals (or in the latter part of the period, skysails) which from the absence of footropes, braces and clew lines are evidently rigged flying, yet I do not recall one where the sail is not set over a stay, thus excluding (a). Nor do I remember one where a royal is furled, polacre fashion, beneath the topgallant stay; which excludes both (a) and (b). But during that period when rigging royals flying was so common—and so well nigh universal in the first part of it—one can find an abundance of pictures both of men-of-war and merchant vessels, which have royal masts or topgallant poles long enough to set royals on, but where the royal yards are not crossed. Method (c) hence appears to have been by far that most used.

WOMEN IN H.M. SHIPS

Various facets of this subject have been discussed in the *Mariner's Mirror* from time to time, and one hesitates to revert to it without some substantial piece of evidence. However, I came across the following in the *Bristol Mirror*, for 17 December 1864, and it might be worth recording with the other items. 'An octogenarian named Mary Sperring has died at Burnham. The old lady was present with her first husband at the Battle of Trafalgar.'

She was presumably the Mary Ann Riley mentioned, as one of the three women who applied unsuccessfully for the Naval General Service Medal in 1847, in Commander Rowbotham's previous paper in the *Mariner's Mirror*, Vol. xxIII, p. 367. The Burnham referred to in the

quotation above is that in Somerset, since renamed Burnham-on-Sea.

GRAHAME FARR

THE LOSS OF H.M.S. VICTORIA

With reference to Commander Hilary Mead's most interesting article on this subject which appears in your issue for February 1961, Admiral Tryon, while holding an earlier command, once contemplated carrying out a similar manoeuvre with his squadron which might also have produced disastrous results had his staff not protested, and persisted in their protests until the admiral gave way. My father, the late Admiral R. S. Phipps Hornby, was his flag lieutenant at the time.

The occasion was the annual manoeuvres in the year 1887 or thereabouts. Admiral Tryon held the appointment of what I understand was styled Admiral Superintendent of Naval Reserves.

His squadron was composed of what were known as District Ships for Coast Guard. Normally those ships were dispersed round the coasts of the British Islands; but for manoeuvres they were

concentrated to work as a squadron under their own admiral.

Admiral Tryon, with his squadron formed in divisions in line ahead disposed abeam, was moving down Channel to meet the Board of Admiralty, which was afloat and coming up Channel on board the Admiralty Yacht *Enchantress*. It was Tryon's intention so to place his squadron that the *Enchantress* would pass between the columns. Then, at the appropriate moment, he would reverse the course of the squadron by turning leaders together, remaining ships in succession, leaders turning inwards, so as to finish up with the guides of columns on either quarter of the yacht.

With the Enchantress in sight, but still some distance off, my father left the deck on some errand. When he came on deck again, he saw to his horror that the turning signals were already flying, although the columns were too close for the manoeuvre to be performed with safety. So he hurriedly informed the flag captain. There followed within the privacy of the charthouse an interview that appears to have been decidedly stormy; for the formidable and masterful (though essentially kindly) admiral did not take easily to the questioning of his decisions by subordinates. However, his staff stood their ground. In the end the admiral gave way; the turning signals were negatived until the distance between columns had been increased to a safe figure, and the intended manoeuvre was then carried out safely and with effect.

My father never committed himself to any categorical opinion as to how the *Victoria* disaster came about. His surmise was that some mental aberration prevented the admiral remembering that as ships had grown larger their turning circles had increased. But more than once he declared his opinion that had Sir George Tryon's staff in the *Victoria* persisted in their protests, as happened in the *Northumberland*, the admiral in the end would have given way, and a great tragedy would

have been averted.

W. M. PHIPPS HORNBY

QUERIES

11. (1961). Roman models. Does any member know of any Roman representations of ships and boats found in Britain, and where they are to be seen? I only know of a bronze model of a Roman galley prow found in the Thames and now in the British Museum.

PETER R. V. MARSDEN

- 12. (1961.) 'PORT TACK'. A Sussex Yacht Club has in its possession a ship's Bell which, as is usually the case, has the ship's name *Eliza Emma* cast on it. But in addition to this there are the words 'Port Tack' also on the bell, round the rim. Can any member say what is the significance of these words? The *Eliza Emma* was a snow.

 H. O. HILL
- 13. (1961.) Fore-AND-AFT OR SQUARE RIG AS A DESCRIPTION OF UNIFORM. A compilation by Commander A. Covey Crump entitled *Naval Information*, which was produced in 1955, states that fore-and-aft rig is the general naval term for the jacket and peaked cap uniform worn by petty officers as opposed to square rig for 'men dressed as seamen'.

Such was the use of these terms from my own recollection, but recent information that the reverse was common usage before the First World War led me to discuss the point with four warders of the National Maritime Museum, who were old Navy men with experience going back to 1913. Their unanimous opinion was that the lower deck called the jumper fore-and-aft rig, because you dived into it end on, and that they never heard of square rig until in 1920 petty officers of over 4 years' seniority were given gilt buttons.

A friend who took up the enquiry was told by a rear-admiral and three captains that they had always heard the jumper with its square collar called square-rig and the buttoned jacket fore-and-

aft, at any rate from 1910.

When and how did this confusion arise? Is it that the lower deck and the quarter deck had different usages and that the latter has now ousted the former? I should be most interested to hear members' opinions on the matter, especially if they can produce any written or printed evidence.

W. E. MAY

14. (1961.) Enquiry RE CERTAIN OFFICERS. Is anything known of the place of birth, early life and subsequent careers of the following who served as surgeons (amongst others) with Captain Cook on three voyages: William Perry, John Patten, Thomas Andrews, John Law and William Ellis?

W. SNELD

ANSWERS

- 15. (1960.) The whoreship FLYING ZEPHYR. Persistent reports in the Pacific recount the four voyages of the floating bawdy house Flying Zephyr, which reportedly sailed from Boston around the Horn, to ports in the Pacific Northwest, thence to Hawaii, the South Sea Islands, Australia and New Zealand during 1850–55. Owned by Anna Maygood Dare she reportedly was built for Beauchamp and Markham, of Boston, in 1843. The Captain was Jonathan Evans. The ship was wrecked on Guadeloupe in February 1855.
- 16. (1959.) TITLES OF RANK. In the *Mariner's Mirror* for August, Vol. 46, no. 3, p. 234, in a query as to the date of origin of the word *skipper*, Captain Edgar K. Thompson says that when this 'first appeared in English I am unable to establish but it is found in a poem by Sir Patrick Spens:

The King sat in Dunfermline tower, Drinking the blood-red wine, Oh whare'll I get a skeely skipper, To sail this ship o' mine.'

But 'the King in Dunfermline toune' was Scottish and the ballad not 'by Sir Patrick Spens' but a lament for his death.

The point on which Scottish antiquaries have mostly agreed is that Sir Patrick Spens is one of the oldest effusions; and that the disaster it commemorates was in 1281, when, after escorting Margaret daughter of Alexander III to Norway to marry King Eric, the knights and nobles who had accompanied her were wrecked and drowned on their homeward voyage. Whether the

ballad is exactly contemporary with the event is still disputed.

It was quoted for a different reason, in an article on Ballad Poetry of the Sea by Julian Tenison (Lieutenant-Commander, R.N.) in the Journal of the Royal United Service Institution, reprinted by permission in Khaki during the First World War: ... Sir Patrick Spens, chiefly is remarkable as giving an early example of the use of a device common in the modern men-of-war. To stop the rent in the vessel's side Sir Patrick orders his men to

"Gae fetch a web o' the silken claith,
Another o' the twine,
And wrap them into our gude ship's side,
And letnae the sea come in."

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This is on the same principle as the modern collision-mat—a piece of canvas stitched with oakum, placed in case of emergency of a hole in the hull to keep out the water. Unfortunately for Sir Patrick it proved ineffective:

"O laith, laith were our gude Scots lords
To weet their cork-heel'd shoon;
But lang ere a' the play was play'd
They wat their hats abune.

And mony was the feather-bed
That floated on the faem,
And mony was the gude Scots lord
That never mair cam hame.""

Possibly some of the Scottish members of the Society for Nautical Research may be able to tell us whether there had been any more recent conjecture as to the actual date of composition of a ballad which has remained almost as popular as that on the death of Sir Andrew Barton, who was mortally wounded in action against some ships fitted out for his capture by King Henry VIII:

'Fight on, my men', Sir Andrew sayes,
'A little I'm hurt, but yett not slaine,
I'll but lye down and bleed a while,
And then I'll rise and fight againe.'

'Fight on, my men', Sir Andrew sayes,
'And never flinch before the foe,
And stand fast by St Andrew's cross
Until you hear my whistle blow.'

'He then dies silently, and his men continue the fight, waiting for him to blow the whistle which he never can blow, until at last the ship is boarded and taken by their opponents.'

Whether for Scotland or England, the sea in verse has been oftener commemorated for its

grim destructive powers rather than in relation to the triumphs of seamanship:

'Though gallant ships and favouring winds offer the fairer prospect, it is in "the slimy bottom of the deep" that the poetic fancy may well see, the elements of song and story. The darkness and silence, the mystery, the fearsome monsters that dwell in the depths, the rotting ribs of the old sunken ships, the bones of the English and Spanish seamen that people the floor of the ocean, with the treasures fought and died for, now lying useless beside them in the ooze, contain the elements of a hundred romances yet to be written.'

But the business of the S.N.R. is with the actualities of the Sea Services, not with romances—if indeed the two can be entirely separated; which depends upon what each person means by 'romance'. Poetry and prose are sometimes related. John Donne's poem The Storm, treated by his landsmen editors as sheer fancy, has been proved to be an almost literal description of the tempests faced in the Azorean Expedition of 1597, in which Donne (future Dean of St Paul's) was a 'voluntary gentleman' under the Earl of Essex, on a voyage during which some of the officers and men actually died of seasickness. Raleigh claimed that the tempests were beyond the power of mortal man to overcome; and the Master of the Field Ordnance, Sir George Carew, recorded in his Journal the vagaries of 'the vehementest wind' he had ever encountered. Yet (as Professor Callender used to remark) not even one ship was lost; and though it has been customary in our time to scoff at this voyage, those immediately concerned objected to criticism from persons 'by the fireside who now discant upon us. We know they lacked strength to perform more, and believe they lack courage to adventure as much.' Actually the discipline and endurance of all ranks during the 'Islands Voyage' afford a striking contrast to the unhappy expedition of 1625. E. M. TENISON

14. (1960.) NAIL COLOURS TO MAST. On 5 September 1813 U.S.S. *Enterprise*, commanded by Lieutenant William Barrows, met with and engaged H.B.M.S. *Boxer*, commanded by Captain S. Blyth. A 40 minute sea battle took place off Portland, Maine, and both commanders were killed early in the fight.

R. W. Neeser's Statistical and Chronological History of the United States Navy cites multifarious sources covering the incident (Vol. 11, p. 51), and makes specific reference to nailing colours to the mast as follows: '... The Enterprise had but one 18-pdr. shot in her hull; the Boxer had 18 do., and several of her guns dismounted. Her colours had been nailed to the mast.'

JOHN F. CAMPBELL

1. (1961.) ENQUIRY RE CERTAIN OFFICERS AND MEN.

(a) John [not James] Maloney, A.B., of H.M.S. Speedy was born, according to the Muster Book of that ship for 1796, at Tipperary in 1774. John Brown, A.B., was discharged of 15 January 1806 from H.M.S. Victory to H.M.S. Ocean, and on 17 January 1806 was discharged thence to H.M.S. Fame. Their subsequent careers could be followed in the Muster Books at the Public Record Office.

(b) According to Manning, T. D. and Walker, C. F. British Warship Names (1959), H.M.S.

Euryalus, 5th rate of 1803 was still in commission in 1822.

Rear-admiral Rodney Mundy's career is described in the Dictionary of National Biography...

E. K. TIMINGS

1. (1961.) Enquiry RE CERTAIN OFFICERS AND MEN. I can only answer a small part of this query. The Euryalus mentioned as being in the Mediterranean in 1822 must have been the Trafalgar ship as the next of the name was not built until 1853. The original Euryalus was a convict ship at Chatham from 1826 to 1844 and at Gibraltar until 1859. In this year she was renamed Africa and was sold in 1860.

Blackwood's Euryalus was launched at Bucklers Hard on 6th June 1803. T. D. MANNING.

5. (1961.) Bomb vessels. According to Laird Clowes bombs were present and used at the siege of Gibraltar in 1727; at Cartagena and Chagres in 1740; at Cartagena in 1741; at La Guayra: in 1743 and at Aix in 1758.

T. D. MANNING:

7(e). (1961.) KEELHAULING. In the year-book of the Danish Maritime Museum (Handelsog Safartsmuseet, Kronberg Castle), 1956, pp. 89-132, I have published an article 'Kølhaling og raaspring', in which I have examined the two maritime punishments 'keelhauling' and 'ducking'

from the yard-arm'.

In the European maritime ordinances of the sixteenth, seventeenth and eighteenth centuries, especially for the navies and for company ships for the colonies, for China etc., but not in use on common merchant ships, both punishments are often mentioned. The keelhauling was called a punishment 'next to death', whereas the ducking from the yard-arm was considered more shameful than dangerous. By examining the material to which I have had access I am able to state that there are extremely few examples of keelhauling being really carried out. In fact, I have only seen the following cases: on board Dutch ships 1613 and 1669 (Levinus Hulsius, Eylffter Schiffart ander Theil, ab. 1620, pp. 33 seq.; Fr. Bollingii Oost-Indiske Reise-bog, 1678, p. 13) and from Sweden 1633 (Svenska flottans historia (1942), Vol. 1, pp. 366 seq.), but of course there may be other examples which I have not noticed. I am, however, of the opinion that there cannot be many. From the same period there are, on the contrary, a great many examples of the ducking from the yard-arm, which was still in use in the Dutch and French navies till about 1820–30. In the English, Swedish and Danish navies it was abolished during the eighteenth century, although the sea-laws and ordinances still threatened with those barbarous punishments.

It is interesting to notice that the ducking from the yard-arm was also used as a form of baptism of the novices who had not previously passed the Equator, the Tropic of Cancer or the European 'hanse'-places (see my article about Sailors' Baptism in M.M. (1954), Vol. 40, pp. 196–205). Not until the eighteenth century was the baptism on deck introduced in the custom of baptism

at the Line etc.

HENNING HENNINGSEN

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I recollect my father, the late Admiral R. S. Phipps Hornby, telling me many years ago that while he was serving as a midshipman in H.M.S. *Alexandra*, lying in Alexandria harbour, he witnessed the keelhauling of an Egyptian rating who was serving in the (as she was then) Khedival Yacht *Mahroussa*. That was probably just after the Bombardment of Alexandria in 1882.

It was understood that the offence for which the delinquent was so condignly punished was

that he had been discovered in the harem apartments on board that ship.

W. M. PHIPPS HORNBY

7. (1961.) An obscure object. The illustration accompanying Admiral Blackman's query is very probably of a wooden life-saving buoy. Examples of these may be seen on several models in the Musée de la Marine, in Paris, notably Nos. 519, *Le rivoli* and 750, *La belle-poule*. This type of buoy (if it is a buoy) was usually suspended from the extremity of the spanker boom, from which position it would, when slipped, fall well clear of the ship.



Fig. 1

A slight refinement in some of these objects consisted of a number of short ropes presumably for the convenience of the man in the water. See rough sketch above.

G. R. G. WORCESTER

REVIEWS

ARMADA GUNS. By MICHAEL LEWIS. George Allen and Unwin, 1961. 243 pages. Price £2. 2s.

This is a reprint of the eight separate articles on the Armada Guns which appeared in the Mariner's Mirror between January 1942 and October 1943, with the addition of an Index and a Preface. The articles can be considered one of the first fruits of the creation of the National Maritime Museum for, Professor Lewis tells us in his Preface, it was during its formative period in the mid '30's that, in the process of sorting books and manuscripts accumulating at the Royal Naval College, Greenwich, for it, he came upon two key and previously unstudied documents relating to the Elizabethan navy and its guns.

It is generally accepted amongst historians of the period that Professor Lewis has established within narrow limits the probable armament of the English fighting ships that took part in the Armada actions; furthermore, that he has established reasonable estimates of the minimum armament of the Spanish Armada's fighting ships—its escort, for the Spanish Armada as a whole was a military convoy. The researches that culminated in this achievement were protracted and exacting, calling for that mastery of detail combined with imaginative insight which alone will

establish the relationship between facts and figures which, to earlier workers in the field have appeared disconnected and without significance. This is historical research of the finest quality. It is this sort of inspired industry which produces results of the greatest practical value. In this instance, the value lies not so much in what is established as in the technique of research formulated to achieve the desired aim for, conscientiously executed, it did achieve the aim.

Armada Guns, studied closely in its original form in the year after the end of the Second World War, showed what could be done with apparently intractable operational records to elucidant operational obscurities and to solve operational conundrums of the recent war at sea. Over the intervening years techniques of quantitative historical analysis, based upon those pioneered, it so far as maritime history is concerned, by Professor Lewis in his treatment of the problem of the Armada Guns, have established beyond all reasonable doubt the answers to the question—vitae to the country-how and why the Battle of the Atlantic was at first nearly lost and finally was won. Moreover these techniques are now powerful intellectual weapons stored in readines against all evil traps in the armoury devoted to the attack and defence of ships at sea. Thus, although in itself the question of the Armada Guns is no longer of importance to the nation's sea affairs the attempt to establish their importance in 1588 is. It is so, be it stressed, not because the countries the countries of th plexity of the problem of the Armada Guns problem led to the application of the scientific method to solve it, not because the result was successful, but because the attendant success inspired to application of the scientific method to the study of recent maritime operational problems whi appeared no less intractable than had those of the Armada Guns, and with no less success; and because the development of his technique of historical research is the most significant that has

Whatever the professional may aver there is in war a cardinal factor—mobility. Superior tactical mobility enabled the English ships to keep out of trouble. If they had lost that superiority

they must have lost all, yet with it alone they could not destroy the enemy by gunfire.

This, of course, is the conclusion to be drawn, and which Professor Lewis draws, from the facts and figures which he has assembled, marshalled and analysed with such mastery. It therefore, doubly satisfying that this was also the conclusion of an Elizabethan student of was who expressed it in print within five years of the Armada campaign and who was not one od Professor Lewis's sources. Matthew Sutcliffe—for he it was—is thus an independent contemporary corroborator of the correctness of Professor Lewis's conclusions. Matthew Sutcliffed published his Practice, Proceedings and Lawes of armes in 1593 for the very reason that the was with Spain was continuing and the lessons already learnt since it began, as well as those learnt in earlier times, should be brought home to English commanders for their wise guidance in the present and the future. 'If that our ships had not had the advantage of sailing, when the Spaniarc' came to invade us', wrote Sutcliffe, 'God knoweth what would have been the issue.' (Professo-Lewis writes: 'If the gun had been the sole factor which could decide the issue, it would not be at all safe to hazard a guess as to which side would have emerged the victor.') That ships 'mark be vantageous, in fight, and fit for service', wrote Sutcliffe, 'a principal point is that they be made swift of sail, and sharp to goe near the wind. This only one advantage next unto the power of Goo. gave the victory to the navy of England, and the foil to the supposed invincible navy of Spain.'

'If they be too weak, those that are swift of sail may safely depart, if they prevail, no ship can escape them by sailing...' as the Armada actions had liberally illustrated. Moreover, Sutcliffwas exceedingly critical of the tactics of battle by bombardment without boarding. The onr damage great guns do, he said, is to make noise.' 'If the sea move never so little, twenty to one but the shot falleth either high or low, unless the ship cometh very near, which many cannot for fear of grappling.' Even if great shot could do what was claimed, but demonstrably had failed to do for 30 years, how were ships to carry the ammunition, Sutcliffe demanded, when, in 2 days 'most of the ships' opposing the Armada 'had spent most of their powder, without any sensibles to the enemy? 'Let men provide,' he urged, 'that they may not only overcome the enemy with sailing.' They did, as Professor Lewis also shows. But they did not provide better arms for boarding, as Sutcliffe urged, but for bombardment at closer range—more and heavier medium

and close range guns—as the Spaniards had already done.

Armada Guns merits close reading and disciplined thinking. It is, par excellence, a work of letection. As fascinating as a good detective novel it has the added merit of being good history.

THE BATTLE OF MATAPAN. By S. W. C. PACK. London: B. T. Batsford Ltd. 1961. 9 × 6 inches; 183 pages. Price 21s.

The publishers of The Battle of Matapan are producing a succession of volumes called 'British Battles Series' of which this is the eighth and latest.

If all the others are as good as the volume now being reviewed they will make an extremely

worthwhile set.

This book is particularly interesting as its author is both a naval officer and a naval historian of high repute and, moreover, he was present during the battle in H.M.S. Formidable. It was this vessel; an aircraft carrier, that took such an important part in the action, the first in which carrier-borne aircraft had played a decisive role; as a matter of historical interest it was, too, the first large fleet action since Jutland. Although the Italian fleet was superior to the British in speed and guns it lacked two vital things, which we had, namely an aircraft carrier fully manned with experienced R.N. airmen and ships that were fitted with radar. Neither of these were present in the Italian fleet, which had to rely on visual lookout for warning of an enemy approaching. It was, therefore, by means of these two very modern additions to the fleet that the Battle of Matapan turned out to be a great victory for the British fleet whereas without them it might very easily nave turned out to be a great British disaster, as anyone who reads this book will see for himself. Captain Pack's own job on board the Formidable was to provide information about the wind and weather and in addition to keep a narrative of the battle and his action station for this was on the compass platform. There cannot, therefore, have been much that was missed by the author, and all that it was humanly possible to see through one pair of eyes was duly noted and later on produced in this volume. It is this first-hand account, checked and, at times, helped out by other people present in the ship at this action and the very simple, easy style in which the whole book is written that makes it such a very absorbing history and one that is a 'thriller' in the best sense of that word. One somewhat interesting point is brought out on several occasions and that is the importance of the force and direction of the wind. Not so much as it affects the aircraft themselves, that is fairly obvious, but as to the way it can delay the progress of the fleet by forcing the carrier to turn up into the wind each time a plane has to take off; it can be realized that if half a dozen aircraft or so are taking off, and all this time the carrier is, say, steering away from her original direction, what a difference it could make as to whether the enemy escaped or were intercepted. The wind once again has thus to be taken into account as to when and how a sea fight shall take place. Another point of particular interest noted by Captain Pack, is in the chapter giving the Italian view, namely that Admiral Iachino, the Italian C. in C., said 'that the concept of a conflict with the British Navy had always been excluded from the practical studies undertaken at the Italian Institute of Warfare'. The numerous track charts throughout the book are extremely clear and help very much to make plain what is happening at each stage of the battle.

Finally the book has five very useful appendices and a good index and is illustrated by some excellent photos taken from both sides of the action, British and Italian. A very pleasant dust acket, a reproduction of Norman Wilkinson's painting of the Battle of Matapan, now in the National Maritime Museum, completes a very nicely produced book.

EN BERETNING OM AMERIGO VESPUCCI. By CARL V. SØLVER. In Søens Verden, No. 9. Copenhagen, 1960.

n this article Captain Sølver discusses the question why America is named after Vespucci and not after Columbus. The answer is that Vespucci claimed to have discovered the north coast of South America in 1497, more than a year before Columbus—in his third voyage—and a

few days before Cabot reached the northern continent, and that he 'got away with it'. The claim was first set out in letters written by him in 1503-4 after what he called his fourth voyage to the westward and was further publicized by Waldseemuller, who proposed in 1507 that the new land should be called 'America' after him.

Captain Sølver is one of those—the majority—who believe that the voyage of 1497-8 was entirely imaginary and does not hesitate to describe it as a 'swindle' and compare it with Dr Cook's pretended journey to the North Pole. He points out that there is no mention whatever of it as the time and that as early as 1513 Waldseemuller had changed his mind and published a mass with an inscription to the effect that 'this land [South America] and the adjacent islands were discovered by Columbus...' and no mention of Vespucci or the name previously suggested.

The whole story is told at some length and illustrated by reproductions of maps, title-pages, etc. The last of these is a splendid coloured plate showing the western part of Juan de la Cosa's 'Mapon

Mundi' of 1500.

R. C. ANDERSOD

REPORT TO THE GOVERNMENT OF PAKISTAN ON THE MECHANIZATION OF WEST PAKISTAN FISHING BOATS (F.A.O. REPORT NO. 403). Based of work by Henry Magnussen, Curt S. Ohlsson, Peter Gurtner and Jan-Olof Traung, Rome, Food and Agriculture Organization of the United Nations. 1955. 8\frac{3}{4} \times 11 inches; illustrated with plans, graphs and diagrams.

No. 1 of Volume 42 of the Mariner's Mirror contained an article entitled 'The Karachi Fishing Boats' in which I endeavoured to supplement from the nautical research point of view the findings of a practical investigation into the ways in which the West Pakistan fishing boats could 's improved and metallized which had recently been conducted by the Food and Agriculture

Organization of the United Nations.

The full report of the F.A.O. to the Government of Pakistan has now been published. If represents the outcome of what is probably the first thorough professional examination of the design of a group of what it was once the fashion to call 'primitive craft'. The report represents the outcome of many months of work by many people, on the West Pakistan coast, in the testing tank, and on the drawing board. It comprises a statement of the objectives of the investigation 'To study certain local types of fishing vessels used on the West Pakistan coast, in order to advise and assist the Government in developing the design of improved types of mechanized fishing craft, suitable for local use,' a section of General Observations on the West Pakistan Fishing Boats an Examination of the Possibilities of Mechanization of Available Boats, notes on the Construction of New Boats, and Recommendations on Mechanization, Construction, and Technical and Financial Aid.

The report is of the greatest concern to those whose interests lie in Eastern boats, and especially to those interested in designs of Arab origin or which have developed under Arab influence. The outcome of all the tests is extremely favourable to the Pakistan boats. 'A rapid survey made by the F.A.O. Regular Program naval architect in 1951 indicated that the Pakistani boats were of an unusually advanced design, complying with modern laws of naval architecture, and he felt that the mere introduction of boats from abroad would not necessarily result in a more efficient fleet than could be obtained by mechanizing the local boat types and modifying them slightly so as to make them more suitable for fishing with modern gear and methods.' The tank tests confirmed this view. C₁ curves showed the Pakistan boats to be better than a whole series of typical European-powered commercial fishing boats, designed without tank tests, at speeds higher than about 7 knots. 'It is reasonable to state', the report goes on, 'that the Pakistan boats are equally good, if not better, regarding resistance characteristics, than typical fishing boats in use in Europe today', and, later, 'the original lines might be said to be excellent for sailing. It should further

be borne in mind that despite extensive model tests and much work it was only possible to decrease the resistance by 10 to 20 per cent, whereas the resistance of normal fishing boat lines used in so

called developed countries can usually be reduced by 30 to 40 per cent.'

The report goes on to deal at length with the technical problems of fitting motors to the existing fishing fleet and proposes a design for a new motor sailing *Bheddi*. This is a very handsome-looking vessel. It differs from the traditional design in having a somewhat narrower transom, a fuller body forward, and correspondingly wide foredeck, slightly less rake on the stern and transom, and, a very important step on the path of evolution which all fishing boats take sooner or later, a fixed deck. The lateen rig is retained on the grounds that it is both efficient and familiar to the fishermen, though the sail area is somewhat reduced.

The Pakistan Government is recommended to build at least two trial boats to this design and

to encourage the introduction of specific types of motors in the existing fishing boats.

BASIL GREENHILL

THE CRUISE OF THE PORTSMOUTH 1845–1847. A sailor's view of the Naval Conquest of California. By Joseph T. Downey, Ordinary Seaman, U.S.N. Edited by Howard Lamar. Newhaven, 1958. $9\frac{1}{4} \times 6$ inches. Price \$6.00.

This is not a new book, it was in fact written more than 100 years ago, and little is known of the

history, both of the manuscript and the author.

In the fall of 1955 a letter from the Chesapeake Book Company offered an anonymous journal of a naval enlisted man in the California Conquest. Sent to Yale University on approval, it proved to be a tall quarto volume bound in shabby half-calf, together with an unbound, but sewn

quire amounting to some two hundred and fifty pages.

The bound volume bore the title, Odds and Ends: or incidents of a Cruise in the Pacific In the U.S. Ship Portsmouth from January, 1845 to May, 1847, by 'Fore Peak'. It was not the usual Sea Journal or Log; but rather a racy portrait of life in an American warship as seen from the lower deck, told in a series of sketches, more or less humorous, and an account of the Navy's share in the Conquest of California, containing much that was new and significant detail.

It was in fact something entirely new and of the first importance both from a collector's point

of view and that of a student of history.

The University of Yale's Library brought this book to the notice of Mr Frederick W. Beinecke, an ardent collector of western books, and he acquired it and most generously presented it to the

Library.

The treasure having been secured, there remained the problem of identifying the author and tracing the history of the manuscript. The name Josep. T. Downey appeared on the inside cover of the manuscript, and it was apparent that the writer had been Yeoman of Stores in the Portsmouth.

The Navy Department was able to provide the outlines of Downey's naval career, but except for his later reappearance in California after his discharge from the Navy, the rest of his life is

completely unknown.

In 1844 the *Portsmouth* was a new ship, designed by Josiah Baker, the Master Builder of Portsmouth Navy Yards, and had already established for herself a reputation as a fast and sea-worthy craft in every respect. She was rated as a ship-rigged sloop of war of 20 guns. Her tonnage is

not given.

Her Captain was Commander John Berrien Montgomerey, a veteran of the war of 1812 and he was noted as a kindly God-fearing man, though like other commanders of his day, he was free enough with the cat (of nine tails) for even minor offences. Our hero and author, though obviously a man of considerable education and above the average in intelligence and ability was flogged at the Gangway on various occasions, mostly for indiscipline, but on one occasion at least for being

drunk on duty. His description of himself, written under a pseudonym, is candid and revealing: "...a wild harum-scarum blade yclept Joe (Joseph T) Downey, who had passed through many a grade on board said ship, from Yeoman to confidential clerk to the executive officer; down too one of the After Guard, and steady sweeper of the quarter deck. His love of change and irresistibles thirst for mischief prevented him from holding one place long at a time. Joe was good enough in his way; but his was a bad way for a man of war, and this way, bad as it was, he seemed determined to have, despite of law, gospel, or that stringent argument the Cat (o' nine tails). Joe was as favourite with the crew, and didn't give a damn for the Officers, and his fate though a checkered one suited him well enough and he was happy.'

His journal on board the *Portsmouth* consisted of a set of sketches to be read to his fellow sailors for their entertainment, though apparently with some hope of publication some day, for her appended a formal preface to his manuscript and provided himself with the pseudonym 'Force Peak'. He also thinly disguised officers and members of the ship's company who came under these

scrutiny of his sometimes sarcastic pen.

Despite many difficulties, and opposition from the Officers, he succeeded in recording his

impressions of life on board the Portsmouth for two years (January 1845 to May 1847).

Odds and Ends, for so he designated his sketches, is perhaps most notable for its candid pictures of the life of a foremast man in the U.S. Navy in the 1840's. Downey's purpose was to amuse and entertain, not to instruct or reform; he never moralizes. He was an amateur writer with littlessense of literary organization. His journal for instance can never compete with Dana's Two Years. before the Mast: Still it is worthy to take its place on the shelves in company with that famous

classic, and with other great American stories and chronicles of the sea.

The most important and interesting part of this book, from a general reader's point of view, is the day-to-day account of the U.S. Navy's part in the almost bloodless war for the Conquest of California. It is difficult to realize that little more than 100 years ago San Francisco, then known as Yerba Buena (good grass) was an insignificant Mexican Settlement. Downey estimates the whole male population present at the ceremony of the U.S. occupation at 25 to 30 souls (in 1846). Lieutenant Washington Allen Bartlett U.S.N. was the first mayor of San Francisco, and the first Town Clerk was Ordinary Seaman Joseph Downey!

Report on the Manuscripts of the late Allan George Finch. Vol. III. 1691 with Addenda 1667–90. Edited by Francis Bickley. (Historical Manuscripts Commission, 71). H.M.S.O. $9\frac{3}{4} \times 6\frac{1}{4}$ inches. 522 pages; index. Price 75s. net.

This massive volume continues, for the year 1691, the correspondence of Daniel Finch, second: Earl of Nottingham, while Secretary of State to William and Mary, together with a few additional papers of earlier years, and a rather larger number for 1689 and 1690, which supplement Nottingham's correspondence as published in Vol. 11, which appeared as long ago as 1922. The 1922, volume covered Finch's period in charge of the Admiralty in the last years of Charles II.

Because of Finch's earlier experience in naval matters, this new volume is of interest to specialists in its naval aspects, and it throws much light on the personal difficulties of dealing with Admiral Russell, who held chief command at sea. The papers also include extensive material on Irish affairs; on the pacification of the Scottish Highlands; on the Hague Congress, where Nottingham was in attendance on William III, and on the King's relations with Sweden and Denmark. The actual material is not easily digestible, but in his Introduction, which extends over fifty pages, Mr Bickley has provided an admirably clear and scholarly survey and digest as a guide to the reader.

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